

**The Effects of the Economic Structural Adjustment  
Programs on Agriculture in Sub Saharan Africa: A Case  
Study of Zimbabwe 1990-2000**

A Research Report

Presented to

The Graduate School of Business  
University of Cape Town

In partial fulfilment  
of the requirements for the  
MCOM in Development Finance Degree

By  
Ropafadzo Shoko  
January 2016

Supervised by: Dr. Steven Nabieu Rogers

The copyright of this thesis vests in the author. No quotation from it or information derived from it is to be published without full acknowledgement of the source. The thesis is to be used for private study or non-commercial research purposes only.

Published by the University of Cape Town (UCT) in terms of the non-exclusive license granted to UCT by the author.

## **PLAGIARISM DECLARATION**

I know that plagiarism is wrong. Plagiarism is to use another's work and pretend that it is one's own.

I have used a recognized convention for citation and referencing. Each significant contribution and quotation from the works of other people has been attributed, cited and referenced. I certify that this submission is my own work.

I have not allowed and will not allow anyone to copy this essay with the intention of passing it off as his or her own work.

Signed by candidate
---------------------

Ropafadzo Shoko

## **Abstract**

*The Zimbabwean economy has been in decline for the past two decades with the economic situation reaching its worst state in 2008. This period was followed by the adoption of a multi-currency regime in 2009, which the Zimbabwean government hoped would lend some stability to the crumbling economy. The agricultural sector, which was previously considered the cornerstone of the economy has been contributing increasingly less and less to the country's gross Domestic Product, with the current state of the sector being the worst it has been since the country's independence in 1980. Much research has been done to establish the source of the decline in the sector with the major findings pointing toward unfavourable weather conditions, the issue of the equitable distribution of land and the IMF and WB mandated Economic Structural Adjustment Program. This research focused on the effects of ESAP on the agricultural sector with a view to highlight the themes that emerged on key indicators over the adjustment period from 1990 to 1995 as well as a period after to 2000 in order to consider the time lagged effects of adjustment policies. In addition to this, this research investigated the extent to which the ESAP policies were applied, and whether this may have been a reason for ESAP's perceived failings. This paper concluded that despite the shortcomings of ESAP, policies recommended pursuant to this program were not the direct source of the decline of the sector, but rather the non or poor implementation of policies as well as the socio-political environment in the country.*

## Contents

Abstract .....	ii
List of Figures.....	vi
Acronyms and Abbreviations .....	vii
Acknowledgements.....	viii
CHAPTER 1: INTRODUCTION .....	1
1.1 Research Area.....	1
1.2 Methodology .....	3
1.3 Problem statement .....	4
1.4 Purpose and Significance of Research.....	5
1.5 Research Scope.....	5
CHAPTER 2: LITERATURE REVIEW .....	6
2.1 Previous Key Research into Effects of ESAP in Africa .....	6
2.1.1 Naiman and Watkins (1999) .....	6
2.1.2 Muzari and Gwangwava (2014).....	6
2.1.3 IMF ESAF Review Summary .....	7
2.1.4 Daniel Ndlela (2002) .....	7
2.1.5 Potts and Mutambirwa (1998) .....	9
2.2 Country Cases.....	9
2.2.1 Cote D'Ivoire .....	9
2.2.2 Uganda.....	10
2.3 Conclusions from previous research findings .....	10
2.4 Agriculture in Africa.....	11
2.4.1 Poverty Alleviation.....	12
2.4.2 Economic Growth and Development .....	14
2.4.3 Food Security .....	15
2.4.4 Conclusion on the Importance of agriculture in Sub Saharan Africa .....	16

2.5 Explaining the Path of Reform Implementation.....	16
2.5.1 Market Reform.....	17
2.5.2 The role of Socio-Politics .....	17
2.6 The Economic Structural Adjustment Program in the Context of Africa.....	19
2.7 Contextual Background of the role of Agriculture in Zimbabwe .....	20
2.7.1 Dualism of the sector.....	22
2.7.2 Climate Change.....	23
2.7.3 Land redistribution .....	24
2.7.4 Employment creation and income potential .....	25
2.7.5 Zimbabwe’s Policy Environment Prior to ESAP.....	28
2.7 Implementation of Structural Adjustment on the Agricultural sector in Zimbabwe.....	30
2.7.1 Chronology of reform process in Zimbabwe (1990-2000).....	34
2.8 Conclusion to Literature Review .....	37
CHAPTER 3: RESEARCH METHODOLOGY .....	38
3.1 Research approach and strategy .....	38
3.2 Research Design .....	38
3.3 Data Collection, Frequency and Data Choice .....	39
3.4 Data Analysis Methods .....	41
CHAPTER 4: RESEARCH FINDINGS, ANALYSIS AND DISCUSSION .....	42
4.1 Agricultural Exports .....	42
4.2 Agricultural Imports .....	44
4.3 Percentage Agricultural land.....	46
4.4 Crop Production Index.....	47
4.5 Food Production Index.....	49
4.6 Agriculture Value Added (% GDP).....	50
CHAPTER 5: CONCLUSION .....	51

CHAPTER 6: FURTHER RESEARCH AREAS .....	53
Bibliography .....	54
Appendix I .....	61
Appendix II .....	62
Appendix III .....	63
Appendix IV .....	64
Appendix V .....	65

## List of Figures

Figure 1: Number of Poor per day .....	13
Figure 2: GDP Growth Rate .....	21
Figure 3: Dualism of Zimbabwean Agricultural Sector.....	23
Figure 4: Rural Population .....	26
Figure 5: Real Interest Rate .....	32
Figure 6: Agricultural Exports.....	43
Figure 7: Agricultural Imports.....	45
Figure 8: Agricultural Land.....	46
Figure 9: Crop Production Index .....	47
Figure 10: Comparison of Rainfall and Maize Production .....	49
Figure 11: Food Production Index .....	50
Figure 12: Agriculture Value Added .....	51



**Acronyms and Abbreviations**

ESAP – Economic Structural Adjustment Program

ESAF – Enhanced Structural Adjustment Facility

FAO – Food and Agriculture Organization

IMF – International Monetary Fund

UNDP – United Nations Development Program

WB – World Bank

ZIMPREST - Zimbabwe Program for Economic and Social Transformation

ZIMSTAT – Zimbabwe National Statistics Agency

**Acknowledgements**

I would like to express my gratitude to Dr Steven Nabieu Rogers for his invaluable guidance and patience throughout the research process.

My sincere thanks go to Professor Nicholas Biekpe for always making himself available to offer advice and keep me focused on the end goal.

Lastly I would like to thank my family for their continued support and encouragement without which this would not have been possible.

## CHAPTER 1: INTRODUCTION

The objective of this research was to provide a qualitative analysis of the effects of the IMF Economic Structural Adjustment on the agricultural sector in Zimbabwe. Previous researchers have studied the effects of ESAP policies on economic indicators such as Gross Domestic Product (GDP) growth and the contribution of the sector to the economy. In researching the social aspect of adjustment, researchers have used indicators such as government spending on health care and education and the incidence of poverty over the adjustment period in addition to human development indices published by the major donor agencies. This research used the theoretical framework as used by Daniel Ndlela (2002), which used data on Zimbabwe's macro-economic variables over the period in question and measured these against ESAP's stated objectives for the country. In this case study, this approach was adjusted slightly to include a thematic analysis in order to establish recurring themes which may inform future policy making. In order to test the research outcomes in relation to ESAP, the implementation of the ESAP recommended policies was also considered and the extent to which these were applied in Zimbabwe.

In the sections that follow, the research area was explored, paying particular attention to the case of Zimbabwe specifically. The problem statement, research objectives and justification will then be drawn from this context.

### 1.1 Research Area

The Economic Structural Adjustment Program was underpinned by the belief that sustainable economic growth could only be achieved by liberalization of the economy, allowing the market to run in its most efficient state. The removal of restrictions and a reduction in state control was also believed to allow for more efficient allocation of capital, with capital being allocated to the most productive sectors before those with low or no productivity such as social welfare. As highlighted by the IMF ESAF program overview, the poorest in society would then be taken care of by an increase in economic growth, and an increase in the GDP which would also result in an increase in absolute terms in spending on social welfare. Uganda is often cited as the case where ESAP was most successful and achieved the desired results albeit some unintended outcomes.

FULL COLOUR THINKING



The discussion as to whether economic liberalization leads to economic growth has been ongoing for decades with more economically developed countries and multilateral institutions such as the World Bank and IMF being strong proponents of this view. Opponents, however, argued that there is no definitive evidence that market openness is a predecessor for consistent economic growth, citing India and China as examples where despite strong government involvement and a highly controlled market place, the growth of these economies has been robust (Kanyenze, et al., 2011). In the case of Zimbabwe, the international community advocating for the country to take a more liberal approach to the economy believed the tight control that the government had on prices, exchange rates and interest rates, had held back export led growth in the manufacturing and the agricultural sector, the two major contributors to the country's GDP. (Kadenge, Ndoro, & Zwizwai, 1992)

In Zimbabwe, the program aimed to deregulate the domestic economy by removing the government's interventionist prescriptions of the interest rate as well as allowing the exchange rate to float to its 'real' rate, i.e. devalue the exchange rate. In addition to this, ESAP policies prescribed that the number of marketing boards be reduced and the price of goods be left to the market to determine. The exception to this was the price of maize, the nation's staple, which was closely linked to the country's food security, an aspect of agriculture which remained of primary concern to the Zimbabwean Government (Jayne, et al., 2001). The liberalization of trade in the country was intended to encourage the production and sale of goods not only from Zimbabwe, but allowing the importation of goods from other countries that may be competitively priced. This was to be achieved by the removal of restrictions on imports and exports as well as a reduction in the marketing of agricultural goods, i.e. by the Grain Marketing Board. (Food and Agriculture Organization, 2003)

As a result of excessive government spending on social welfare and decreasing revenue due to falling global commodity prices, at the start of the adjustment period Zimbabwe had a government deficit that was in excess of the GDP by up to 7%. A reduction in the budget deficit was to be achieved by decreasing the amount of spending by the state on social welfare, and focusing rather on encouraging the private sector to become more productive. Under ESAP, the government was to rather direct its efforts towards creating an environment that was conducive to doing business (Abalu, et al., 1996) .

The impact of the agricultural sector on the socio-economic development of the largely rural population of the country together with the sector being the second highest contributor to the Gross Domestic Product (GDP), led to its identification as one of the main areas for adjustment. With over 60% of the Zimbabwean population being rural small holder farmers largely dependent on subsistence farming for sustenance and the sector contributing up to 20% to the country's GDP in the late 1980's, this recommendation was received positively by the Zimbabwean government. Critics such as Marquette (1997) and Kanyenze et al. (2011) have asserted that the Structural Adjustment Program had a purely economic focus and failed to take into account the social dimension occupied by agriculture. Furthermore, Stein (1994) highlights that the adjustment programs were not tailored to suit the African policy environment which was characterized by a poor institutional framework, and weak property rights, both of which were necessary conditions for the ESAP's success (Stein, 1994; Heidhues & Obare, 2011)

Despite the agricultural sector having been highlighted as key sector for adjustment policies to be applied, it is not clear how ESAP affected the sector and whether the intended policies were actually implemented. This research therefore looks at the results of the policies implemented in the agricultural sector as part of the structural adjustment program from its inception in 1990 to the year 2000. Particular attention is paid to the extent to which the adjustment policies were applied. Drawing from previous studies and data collected from The World Bank and Food and Agriculture Organization Data bases covering over 20 years, this research looks into whether 'a major source of the decline stems from assumptions that country actually moved to a liberalized market environment, whether many of the most fundamental elements of the reform programs were either unimplemented, were reversed within several years, or were implemented in such a way as to negate private sector investment incentives' (Jayne, et al., 2001). The time period is of particular importance as it not only covers the adjustment period but a length of time following the policy reforms. This is to allow a fair amount of time for assessment of the direct and indirect results of adjustment notwithstanding other contributing factors such as the severe drought the country suffered in 1992 and the land redistribution programs in the same period.

## **1.2 Methodology**

Past researchers who have undertaken a qualitative analysis of the effects of ESAP on the Zimbabwean economy, have used the objectives of the program in respect of Zimbabwe, and

compared these against the actual outcomes, taking note of specific events over the time period being researched that may have had a bearing on the outcome. This research took the same approach. Using data from the IMF, WB and FAO databases primarily, a thematic analysis was conducted to identify themes in the data which was then used as the basis of the discussion into the effects of ESAP on the agricultural sector. This was then compared to the broad outcomes intended by the IMF as a result of the ESAP recommended policies.

In addition to the above, a qualitative analysis was conducted into the implementation of ESAP policy recommendations, with the result being a timeline as outlined in the literature review. This was of particular importance as when considered with specific data points it became clearer as to which effects are attributable to ESAP policies and what is not specifically so. The data analysed was from 1990 to 2000 which encompasses the ESAP period in Zimbabwe as well as some time after to allow for the time-lagged effects of policy implementation to be included in the analysis.

### **1.3 Problem statement**

The current state of the Zimbabwean economy is largely due to the decline in productivity in the agricultural sector. This research aims to look at whether the source of the decline has its roots in ESAP recommended policies.

In Zimbabwe, the agriculture sector has been the major sector of such policy reform and the major target of such structurally adjusted policy reform. According to some authors, the impact of such reform has been significant (Davis & Rattso, 1996). The importance of agriculture in Zimbabwe is multi-faceted. As per the 2004 Zimbabwe Labor Force survey, agriculture accounted for 65.3% of the total employed population (Luebker, 2008) both formally and informally. Additionally, agriculture is the second highest foreign exchange earner after the manufacturing sector, and contributes significantly to the economy directly through exports as well as indirectly through the provision of raw materials to industry (Kanyenze, et al., 2011). Further, the agricultural sector has been identified as a means to achieve poverty alleviation and female empowerment through the support of smallholdings throughout the country, which in turn has been shown to contribute towards the improvement of the human development index as a whole. Whilst research has shown that in some cases the adjustment policies recommended by the IMF and World Bank were inappropriate or

didn't produce the desired outcome, this research looks into whether a source of the decline stems from the assumption that the country actually moved to a liberalized market environment and whether many of the most fundamental elements of reform were implemented as envisioned by the ESAP policy makers (Jayne, et al., 2001)

#### **1.4 Purpose and Significance of Research**

Over the past decade, low income countries have become more vocal about the need for the more economically developed countries, some of whom have highly influential positions in the IMF and World Bank, to be more sensitive to the challenges that emerging economies face in their development paths (Harvard Business Review, 2013). This sensitivity is of particular importance in imposing loan conditionality's as well as policy recommendations to Low income countries. Investigating not only the effects that ESAP had on the agricultural sector but the extent to which policies recommended were implemented, is of particular importance as it will assess the outcomes of the policy recommendations on one of Zimbabwe's most important sectors for the reasons mentioned in the previous section. The outcome of this research will be to highlight the shortcomings of some of the policy recommendations in the setting of a low income country with pressing developmental needs, which have been ineffective up to now. This will serve to inform recommendations on improvements to some aspects of the policies as well as areas in which countries in Sub-Saharan Africa can improve policy implementation.

The outcome of this research highlights some of the contributing factors to Zimbabwe's current economic situation and emphasizes areas where further research is necessary to inform future policy recommendations in as much as structural adjustments are concerned. This information will be useful for policy makers and practitioners as well as those seeking to identify areas where further research is necessary.

#### **1.5 Research Scope**

Given the complex nature of the agricultural sector in Zimbabwe, it was necessary to focus the research on a specific impact area so as to remain within the time and resource constraints of the study. Therefore, the researcher primarily focused on the direct economic effects of the Economic Structural Adjustment Program and focusing on those ESAP policies whose implementation had a direct effect on the agricultural sector as a whole.

## **CHAPTER 2: LITERATURE REVIEW**

### **2.1 Previous Key Research into Effects of ESAP in Africa**

#### **2.1.1 Naiman and Watkins (1999)**

Naiman and Watkins (1999) assess the impacts of ESAP in Africa by using both internal and external reviews of the IMF's ESAF program to assess the expected/planned outcomes Vis a Vis the actual outcomes. They began by highlighting the broad aims of the SAP's, namely the reduction of government spending, the tightening of monetary policy, decrease in government spending on social welfare, liberalization of trade and privatization of state owned enterprises. The paper proceeded to look at the effects of ESAP on Sub Saharan Africa as a whole.

The major finding in this paper in respect of economic growth indicates that countries that undertook SAP experienced lower growth rates than their non-SAP counterparts during the same period, 0% compared to 1% between 1991 and 1995. This is unsurprising given the mandated decrease in public spending which would have led to a decrease in consumer demand as per capita income decreased. ESAP recommended the level of spending on social welfare decrease in the short run to free up capital to allocate to more productive means. In the long run, society was to benefit from the economic growth which would increase revenue and inevitably flows towards social needs. Whilst the internal review of ESAF highlights that education in countries where ESAPs were implemented fared well over the period 1986 to 1996, the same review concedes that in Africa per capita spending on agriculture decreased by 0.7% per year on average. The reduction in social spending appears to have had adverse short, medium and long-term effects, with spending on healthcare and sanitation also decreasing to levels below which the poorest in society could not access basic needs. This situation was further exacerbated by the privatization of the healthcare sector as encouraged by ESAP, which saw labor being drawn from low paying government jobs to the private sector that could afford to pay more (Naiman & Watkns, 1999).

#### **2.1.2 Muzari and Gwangwava (2014)**

In this paper, Muzari and Gwangwava (2014) assessed the effects of ESAP policies on Small Enterprise development in Sub-Saharan Africa. They proposed that the move to liberalizing the economy would be positive for small enterprises as it would create an enabling environment for small and large main stream businesses alike. Mumbengegwi (1992) as



quoted in their paper, went further to cite that removal of government restrictions also allowed small business owners the flexibility to take advantage of new opportunities that would arise as a result of increased competition (Mumbengegwi, 1992).

Their paper highlights that the impact of trade liberalization and the liberalization of the foreign exchange rate on Small Scale Enterprises was divided in Sub Saharan Africa. The impact was largely determined by their level of dependence on imported inputs, in which case an enterprise depending on imported inputs would benefit from increased availability, whilst an enterprise that depended on domestically sourced inputs would benefit from the easier export of goods as was the case in Zimbabwe. Trade liberalization had poorer than expected results on small enterprises in Nigeria, however. The reason behind this being an underestimation of the industry's dependence on imports as put forward by Dawson in his research into the small enterprise sector's response to SAP in Nigeria (Dawson, 1992). Robinson (1991), however, highlights that although liberalization and increased competition may have had adverse effects for small businesses, the consumers benefitted by having better quality options that were competitively priced (Robinson, 1991; Muzari & Gwangwava, 2014)

### **2.1.3 IMF ESAF Review Summary**

The internal review of the Economic Structural Adjustment Facility by the International Monetary Fund found that despite the broad intention to increase per capita income in participant countries, there were some unforeseen challenges that the programs met with which resulted in undesirable effects.

The review highlights the program preparation and implementation as an area of possible improvement, citing poor implementation as one of the major causes of ESAPs not meeting their stated objectives. In order to address these, the review found that the 'ownership' of the ESAP program needed to be made clear from the start as sitting with the country governments, and the disbursements of funds needed to be adjusted to align with meeting program outcomes (International Monetary Fund, 1998)

### **2.1.4 Daniel Ndlela (2002)**

Daniel Ndlela writes about the history of Zimbabwe's economy. In discussing the ESAP period, he notes that most of the targets of the country's SAP were not achieved. He argues

that this is in part due to the drought in 1992 which resulted in funds that were earmarked for economic development being redirected to drought relief efforts.

He asserts that despite the SAP failings, there were some positive aspects. The privatization of marketing boards being a significant step forward particularly in the agricultural sector as it resulted in an increase in productivity e.g. cotton. In addition to this, the devaluation of the Zimbabwean dollar proved to be positive for the country as export levels increased. The increase in exports was also supported by Export Incentive Schemes which not only had a positive effect on the levels of exports but on the export base which became more diversified as a result of the incentives.

Ndlela (2002) also discusses the negative aspects of ESAP in Zimbabwe, naming the lack of consideration for the social aspects of adjustment first. During the ESAP period, the incomes of civil servants, domestic workers and construction workers decreased by 65%, 62% and 56% respectively. The fall in real incomes was further exacerbated by the increase in the prices of basic commodities and food stuffs as a result of de-regulation of food prices. By 1998, the crisis was so bad that riots erupted resulting from the depreciation of the Zimbabwean dollar and an increase in the price of maize meal (The country's staple) by 46%. During the ESAP period, the incidence of poverty increased by 22.9% between 1990 and 1996 largely as a result of job losses and a decrease in real wages of 33% during the period.

At the end of the adjustment period in 1996, the Zimbabwean government perceived ESAP to have been a total failure. In light of this, they didn't maintain the ESAP policies, choosing instead to start a new program, Zimbabwe Program for Economic and Social Transformation (ZIMPREST), whose aim was to restore macroeconomic stability. Between 1997 and 2000, ZIMPREST resulted in the reversal of key ESAP policies such as the reintroduction of price controls, fixed exchange rate and the suspension of corporate foreign currency accounts. Daniel Ndlela (2002) notes however that this program was also a failure as it didn't address the fundamental weaknesses in institutions. The depreciation of the Zimbabwean Dollar by 74% in November of 1997 was a major turning point, with the economy spiraling further out of control at this stage.

In concluding his paper, Ndlela (2002) asserts that the failings of the Zimbabwean economy can be attributed to the governments focus on the political agenda, using agriculture and land

as a political tool at the expense of the livelihood of the large rural population and at the expense of economic growth which depended on export earnings of agricultural produce.

### **2.1.5 Potts and Mutambirwa (1998)**

Potts and Mutambirwa (1998) consider the perceived effects of ESAP felt by society in rural and urban areas. They start by proposing that given that Zimbabwe was not in the same economic situation as other countries in Africa that undertook ESAP, it was not necessary for them to take on the full structural adjustment package from a policy change perspective citing the strong performance of the agricultural sector in non-drought years as an example of the strength of the Zimbabwean economy.

Their research relies on data collected from recent immigrants to the capital, Harare, in order to gain a somewhat objective view of the 'felt' effects of ESAP, as well as to gain an understanding of the difference in impact depending on geographic location within the country. Their research concluded that ESAP had a negative impact in both urban and rural areas in Zimbabwe (Potts & Mutambirwa, 1998)

## **2.2 Country Cases**

### **2.2.1 Cote D'Ivoire**

Prior to ESAP's, Cote D'Ivoire had adjustment program arrangements with the IMF in a bid to access much needed financing and to boost economic growth. The first program was entered into from 1989 to 1993 and the aims were to reduce the budget deficit, decrease government spending, increase tax and to reduce capital expenditure. In 1994, Cote D'Ivoire entered into an ESAP arrangement with the IMF and WB. The aims of this second phase were to create a budget surplus, increase GDP growth to 5% by 1995 and to protect the most impoverished in society throughout the adjustment period.

Between 1989 and 1993, GDP per capita decreased by 15%, the incidence and intensity of poverty increased twofold and spending on health care and education decreased drastically. In addition to this, the country's level of indebtedness increased from the total debt stock being 452.8% of GDP to 545.4% of GDP.

### **2.2.2 Uganda**

Uganda accessed its first Structural Adjustment Loan in 1987 and extended it twice with the last time being from 1998 to 1997. It is often used as the example of the success of SAPS as its GDP growth was 4.2% per year on average from 1992-1997. In Uganda, the IMF focused on liberalization of trade and the reduction of export tariffs on cash crops. The latter was to encourage the export of coffee which is Uganda's main export earner.

During Uganda's adjustment period government spending on healthcare and education increased as government spending as a whole increased. Moreover Uganda was the first country to qualify for debt relief under the Highly Indebted Poor Country Program (HIPC) after meeting all the conditions of ESAP and HIPC. Despite the apparent success of Uganda's SAP, among the criticisms have been that the reduction of export tariffs had little or no effect on the average income of the rural population as few grew coffee and therefore did not benefit from the reduction in export tariffs. In addition to this, despite spending on public health increasing as government spending increased, healthcare spending did not increase as a share of the annual government budget over the period 1992-1997. The sharing of healthcare costs between the government and the patients also had adverse effects on the welfare of society as it decreased the poor's access to healthcare.

### **2.3 Conclusions from previous research findings**

As we have seen from the above, previous research into the effects of ESAP on African countries suggests that the program was not successful for the majority of countries that underwent adjustment. The failings of the program as highlighted above appear to stem from a poor understanding of the African policy environment as well as an under estimation of the importance of influencing factors that are outside the control of macro-economic policy.

The role that agriculture plays in Africa is more than that of a means to an economic end. In the sections that follow an understanding of the Agricultural sector in Africa shall be discussed in a bid to understand the sector and its importance as was affected by ESAP. In Sub-Saharan Africa particularly, where majority of economies are agro based and rural population is more than half of the total population, agriculture is responsible for ensuring that the basic needs of the population are met. International donor agencies and countries channelling aid to the region are cognizant of this and despite encouraging the diversification of the economy, much in the form of resources goes into ensuring that the agricultural sector

is at least able to provide nourishment to its people and at most make positive contribution to economic growth.

Food security, poverty alleviation and lastly economic growth are the 3 major functions of the sector in the region, notwithstanding other important indirect functions that the sector plays in the lives of Africans. These are explained in detail in the review below.

## **2.4 Agriculture in Africa**

Since the first wave of African countries started to gain independence in the 1960's, there was a widely upheld view that their economies would grow rapidly and they would develop in leaps and bounds. By the 1980's however, this view started to turn as the growth rates of these economies slowed down and debt levels started to creep upward to unsustainable levels where these countries such as Malawi were failing to meet their loan repayment schedules (Abalu, et al., 1996). In response to this impending crisis, the Bretton Woods Institutions advocated for some key policy changes and drew up a set of Structural Adjustment Policies, compliance with which was a condition to access "Structural Adjustment Loans" from the World Bank. They asserted that the poor situation African economies found themselves in was a result of misappropriation of public resources, interventionist trade and exchange rate policies and the provision of subsidies to urban consumers they deemed unnecessary. They recommended a liberalization of the economies by allowing market forces to dictate trade and exchange rates broadly speaking. This was the condition to 'Structural Adjustment Loans' (Heidhues & Obare, 2011). These policy recommendations generated a lot of debate in the continent, particularly in development circles whose primary concern was development with a societal focus.

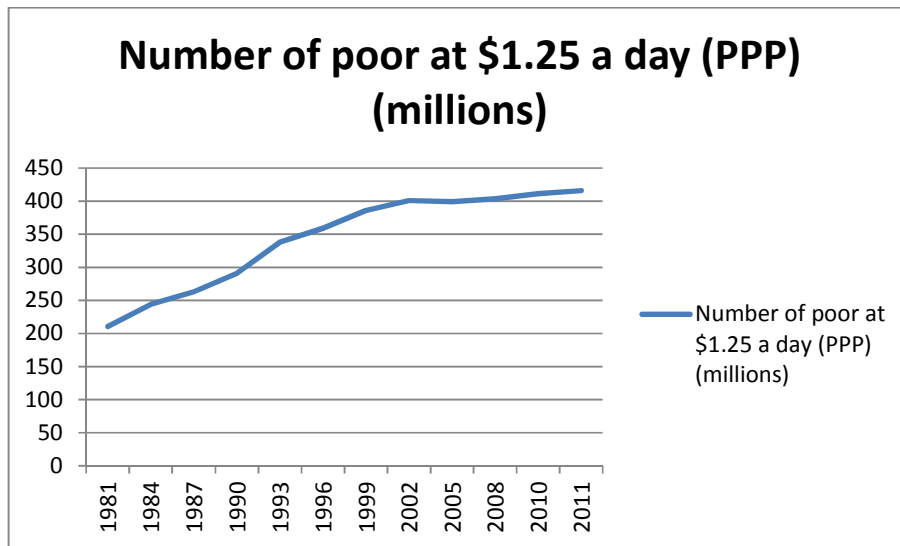
The difference in Zimbabwe, as highlighted by Catherine Marquette (1997), is that the country wasn't in economic crisis when it turned to the IMF and World Bank for funding. Although the country's balance of payments and economic growth were deteriorating and stagnating respectively, it had not yet reached crisis levels (Hoven, Marinakis, Bailey, & Ginneken, 1993). The intervention was intended to 'jump-start' the country's economy, but in the Zimbabwean case, 'the crisis appears to have followed rather than preceded the Economic Structural Adjustment (ESAP)' (Marquette, 1997)

There is ongoing debate about the effects of policy recommendations, and there has been extensive research into the effectiveness of conditional aid/funding with polarizing results (Jayne, et al., 2001). The one school of thought puts forward that the principles that inform the policy interventions by the IMF and World Bank in drawing up structural readjustment programs are drawn from the workings of economies in more economically developed countries, and are often not tailored to suit the environment to which they need to be applied (Machemedze, 2008). As a result, these policy recommendations have met significant resistance not only from local governments, but also from citizens from these developing countries who normally have to undergo the austerity measures recommended by these international financial institutions. The ongoing Greek crisis and the subsequent ‘No’ vote to the austerity measures recommended by the country’s biggest creditors is evidence of this, as the Greeks did not see those recommendations as a viable solution to their debt burden given their other responsibilities to society.

Proponents for stronger and tighter fiscal control through austerity measures and SAPs hold the view that whilst they are in agreement that the results in Low Income Countries have been far from desired, the appropriateness of the policies is not to blame as much research goes into proposed policy reforms (Jayne, et al., 2001). They point rather to a lack of understanding of the policies by government officials as well as the strongly socialist influence in Low Income Countries that holds the belief that the liberalization of the economy will lead to the success of profit maximizing companies who can profit only at the expense of the poorest in society (Jayne, et al., 2001; Harsmar, 2007)

#### **2.4.1 Poverty Alleviation**

The relationship between agriculture and poverty reduction in Africa has been perhaps one of the least contested spaces in development research in Africa. This is because while many researchers may disagree on how to use agriculture to promote subsistence and progress in the continent, there is no debate as to whether agriculture is key to addressing the increasing poverty levels on the continent. Despite being part of the Millennium Development Goals and undertaking to reduce poverty by at least half by 2015, Sub Saharan Africa has seen an increase in poverty levels in the recent past (Harsmar, 2007). The graph below uses data from the World Bank data base on poverty indicators to illustrate the trend in poverty over 12 years.



**Figure 1: Number of Poor per day**

Source: World Bank Poverty Data Base

The World Bank data indicates that with a rural population of 63%, the region is largely dependent on agriculture through subsistence farming for the provision of economic means for the majority of its population (The World Bank, 2014). Harsmar attributes the upward trend in poverty in Sub Saharan Africa largely to the crisis in agriculture in the region. He highlights the argument surrounding agricultures potential for poverty alleviation, explaining that growth in the sector can be positive for the poorest in society if policy focuses on small holdings and food staples. He also puts forward the argument against this potential, stating that given the low prices of food crops relative to high value crops such as coffee and tobacco, there is no hope for the policies to gain traction (Harsmar, 2007). In his paper on the impacts of the Green Revolution, Prabhu Pingali (2012) concludes from Cross-country and time series data that there is a high poverty reduction elasticity for agricultural productivity growth. He uses this to support his assertion that investment in agriculture would make significant strides in reducing poverty rates, estimating that in Sub-Saharan Africa agriculture reduced poverty by more than 4 times the contribution of the service sector. Prabhu (2012) also adds that despite this potential, in South Asia the contribution of the Green Revolution on poverty was lower due to a channeling of attention and resources to the

more favorable areas and not the poorer regions that depended on rain fed agriculture (Pingali, 2012).

Harsmar (2007) supports this view, asserting that agricultural development would not be pro poor since the most valuable agricultural produce would be for high value exports mainly led by commercial farmers and would not benefit the small holders who rely on subsistence farming for their survival. The split between small holder farmers and commercial farmers in Sub-Saharan Africa also skews the income effect of improved development in the regions agricultural sector. Policies aimed at improving the agricultural sector appear to be more impactful for communal farms that are better able to position themselves to gain from such policies (Harsmar, 2007)

Furthermore, at a conference organized by the Food and Agriculture Organization in Rome, the challenges faced by the agricultural sector in Sub-Saharan Africa were highlighted. The discussion highlighted that in order for agricultural growth to go hand in hand with poverty reduction, small holders need to be connected with markets and supported in adapting to new market conditions. The large rural population in the region needed to be protected against its vulnerability to extreme weather events and more importantly price swings (Food and Agriculture Organization, 2009)

#### **2.4.2 Economic Growth and Development**

The agricultural sector is critical to economic growth and development in Sub Saharan Africa. Staatz ,et al. (2008) argue that given the sector employs more than 60% of the population and contributes 27% to the regions GDP, the sector is a key driver of the economic development of the region (Staatz & Dembele, 2008). Given this weighting, Takupiwa Nyanga (2013) argues that it follows that agriculture is the antecedent to growth and economic development in Sub Saharan Africa (Nyanga, 2013).

Early studies in the field of development economics pioneered by Lewis birthed the concept of the dual sector economy. This was an explanation of the growth of a developing economy in terms of labor, specifically its transition between the subsistence sector and the capitalist sector. This model was introduced in the 50's, and during this time, the subsistence sectors, including agriculture were thought to be unproductive uses of labor and resources compared to industrial sector. As such, the subsistence sectors were sectors from where labor and resources could be drawn and redirected elsewhere (Ranis, 2004; Christiaensen, Demery, &



Kuhl, 2010). Research by Staatz et al. however, argues that whilst they are in agreement that the flow of labor will likely be from the agricultural sector, the flow will be seasonal. The driving force is not the lack of productivity in the sector, but rather due to the profits generated in the agricultural sector being applied in other sectors and to individuals and communities resulting in differing rates of return between sectors generating differing real incomes (Staatz & Dembele, 2008)

Pursuing this further, Johnston, Mellor and Schultz (2007) assert that agriculture has an important role to play in the development of an economy particularly in the early stages through its linkages to other sectors (Johnston & Mellor, 1961; Schultz, 1964). The sector is particularly important because of the multiplier effect which sees growth through the agricultural sector occur at much faster rates than growth through nonagricultural channels. Sub Saharan Africa in particular has a substantial multiplier effect (Haggblade, Hazell, & Dorosh, 2007; Pingali, 2012). In their paper on Agriculture for Development in Sub-Saharan Africa, Dembele and Staatz (2008) show using cross- country econometric data analysis that the agricultural sector in African countries offers the best opportunity for further development and economic growth. This is largely due the high rural population that is dependent on agriculture to make a living. They conclude that strong growth in the agricultural sector leads to strong overall economic growth, particularly for countries where the agricultural sector contributes a large percentage to the GDP. The challenge they face however is that the countries are highly differentiated and if an improvement in the sector is to be realized, reforms have to be tailored specifically for each country given its institutional strength, government, infrastructure and environmental factors (Jayne, et al., 2001; Staatz & Dembele, 2008)

### **2.4.3 Food Security**

The importance of agriculture is particularly pegged to its importance in providing food security to the continent. According to the Food and Agriculture Organization (FAO), 33% of the population in Sub-Saharan Africa is under nourished. Whilst more than 60% of this figure is attributable to conflict zones in the region, Sub-Saharan Africa is still prone to food shortages brought on by environmental factors such as droughts, poor rainfall and pests. The economic downturns and lack of funding and support for the agricultural sector is a contributing factor (Food and Agriculture Organization, 2006)

The production of food crops in the region has lagged population growth, which has resulted in increased pressure on the limited resources available. This in turn has led to an increase on the reliance of imports of food. A report by the Food and Agriculture Organization highlights that food security has also become a challenge in the face of increasing poverty levels. As a result of a combination of poor infrastructural mechanisms such as transport and market place accessibility as well as high import tariffs, the food imported is often too expensive for the average family to afford. Therefore, they have embarked on the ‘twin-pack’ approach. The ‘Twin- Pack’ approach by the Food and Agriculture Organization, the International Fund for Agricultural Development and the World Food Program recognizes that food security can be attained through economic growth and higher income levels. They highlight however, that the relationship is bi-directional, in that providing food through social initiatives enables the most impoverished and vulnerable to take advantage of economic opportunities that may arise through development policies undertaken, which in turn will spur further economic growth and decrease the levels of poverty in the region (Food and Agriculture Organization, 2006; World Food Program, 2013)

#### **2.4.4 Conclusion on the Importance of agriculture in Sub Saharan Africa**

As has been highlighted in the review above, the importance of agriculture in Sub Saharan Africa is immense, particularly because it represents the only means for the region to lift itself out of poverty (Staatz & Dembele, 2008). Of importance however, is the recurrent theme that the relationship between agriculture and economic development, poverty alleviation and food security is not uni-directional, but rather it is a multi-directional relationship where in stages the one has to precede the other. International organizations such as FAO have recognized this and have adjusted their interventions in the region to suit (Food and Agriculture Organization, 2006). The success of any policies implemented on the sector with the aim to address any of the abovementioned areas, would also therefore need to take this relationship into account in policy formulation to ensure its success.

#### **2.5 Explaining the Path of Reform Implementation**

As established, the importance of agriculture in Sub-Saharan Africa is multi- faceted. Policies targeted at effecting changes in the sector would therefore need to address the different aspects of import in order to be successful.

Much research has been done in the area of liberalization with mixed research findings. Jayne et al (2001) attribute the mixed research to 4 main factors; the overly generalized way, in which policy reform and liberalization are discussed in literature, the difficulty in tracing the effects of specific policies on agricultural performance, assumptions about formerly controlled market systems and a lack of clarity on whether policies recommended were actually implemented. Whilst the aim of this research was to address 2 of these, namely tracing the effects of ESAP on the sector and shedding light on whether policy recommendations were actually implemented, this section discussed the underlying assumptions made in recommending Economic Structural Adjustment Policies and the concept of liberalization itself. (Jayne, et al., 2001).

### **2.5.1 Market Reform**

The term 'market reform' refers broadly to a change in market policies with the aim of liberalization rather than a technical and prescriptive concept (Jayne ,et al., 2001). Critics of the concept of structural adjustments, cite the fact that the heart of the problem with policies that are proposed as part of structural adjustment are based on the developed world ideals where liberalization and capitalism inevitably lead to efficient markets in the long run assuming the absence of any intervention. The main problem with this underlying assumption is that it fails to take into account key elements that make the reform environment in developing countries vastly different. (Jayne ,et al., 2001; Machemedze, 2008; Kanyenze, et al., 2011)

The concept of liberalization being the key to economic growth is underpinned by the economic theory that says in the absence of intervention, market equilibrium is where the economy is at its most efficient and there is no loss to society. The assumptions underlying this economic theory however, are very rarely the case in reality and as a result liberalization in its purest form is unachievable. As Kanyenze et al (2011) argue, developing countries need a level of economic protection in order to meet their developmental goals and to ensure that any growth in the economy is equitably spread with the poorest of society also benefiting (Kanyenze, et al., 2011)

### **2.5.2 The role of Socio-Politics**

Government plays a large role in the agricultural sector in Sub Saharan Africa. This is not only because of the multi-faceted role that the sector plays in the country, but also because

majority of the population is dependent on agriculture for its survival. Staatz and Dembele (2008) propose that most countries in Sub-Saharan Africa have moved to a multi-party state since 1990. They propose that since the majority of the population in the region is located in rural areas, this is also the largest voter base and as such political reforms have a tended to give the rural population more consideration and there has been a shift in focus toward rural development and agricultural development (Staatz & Dembele, 2008) In this way, Governments continued involvement in the sector through the provision of inputs, subsidies and trade protection, they hold the loyalty of the masses. The result is a relationship based in patronage, “the political logic of a system in which the authority of the state is diverted to enhance private power rather than public interests” (Jayne, et al., 2001). Van de Walle in 2001 highlights that countries in Africa have a system of modern bureaucracy which co-exists with a culture of patronage which allows the systematic appropriation of public goods to further their own interests and allows practices such as rent-seeking and log rolling to thrive within the ‘democracy’ (Van de Walle, 2000).

The research into economic policy that has informed policy recommendations as part of the World Bank and IMF Mandated Structural Adjustment Policies has not delved into the issues of patronage in Sub Saharan Africa (Jayne, et al., 2001). The research has focused rather on economic reform following the political liberalization that swept across Africa in the 1980’s and 1990’s where African states moved from the single party states immediately following independence to multi-party state (Van de Walle, 2000). The result has been policy recommendations that fail to take Africa’s socio-political issues into account. Jeffries in 1993 argued that large International Finance Institutions such as the World Bank were naive in their belief that democratization alone was sufficient condition for the successful implementation of Structural Adjustment Programs, concluding that government processes and the policy environment also needed to be given developmental attention if any policies recommended as part of the adjustment programs were to be effective (Jeffries, 1993)

Van de Walle (2000) highlights that a socio political environment where the elite few have become accustomed to using state resources for personal gain rather than for public good finds the market reform process easy to manipulate for personal gain (Van de Walle, 2000).The result in the agricultural sector has been poor outcomes that have been attributed to ESAP with governments taking little or no responsibility, using the opportunity to slate the

Adjustment Programs as attempts by the ‘West’ to control African economies (Jayne, et al., 2001)

## **2.6 The Economic Structural Adjustment Program in the Context of Africa**

Following the independence of most African countries in the 1960’s, the continent was driven to achieve high economic growth rates in order to catch up with the more economically developed countries. This was to be achieved by focusing on improving the levels of industrialization with other sectors being geared to support this. There was also a widely held socialist driven belief that the government had to play a key role in bolstering industry and creating employment and training. This was largely based on the belief that the private sector would only be effective at the expense of society. The dominant role that government played in the economy initially saw the economy’s growth rates increase at encouraging rates, however toward the 1970’s, the growth started to slow as governments were allocating more to social welfare and spending than to productive investments. The result was a deteriorating Balance of Payment status and increasingly unsustainable state budgets.

The role of the International Monetary Fund in the global financial architecture is to ensure that no one country breaks down the global system. They achieve this by ensuring that all participant countries in the international financial market have a healthy balance of payments, loaning funds in the short term to countries with a deficit they cannot resolve. Given the circumstances of African countries as described above, the situation was within the IMF’s scope of influence. The IMF however, further identified that the problem in African countries could not be resolved by a loan to resolve their Balance of Payments deficit alone. The IMF and World Bank identified that the situation in African countries was due to the poor management of state departments, an overly interventionist approach to the economy with respect to exchange rate, interest rates and prices as well as deteriorating institutional infrastructure. They found the solution in not only providing loans to the countries, but in ensuring that the systemic issues adequately addressed.

In order to operationalize the solution, the IMF would draw up a set of policies/outcomes under the Enhanced Structural Adjustment Facility that the countries applying for the loans would have to undertake to implement whilst the World Bank would provide the funding. The IMF served as the monitoring body, ensuring that the countries were on track in implementing the structural adjustment policies recommended (Heidhues & Obare, 2011). It

is worth noting, however, that the concept of Structural Adjustment was not conceived at this stage but rather enhanced for low income countries in Africa.

## **2.7 Contextual Background of the role of Agriculture in Zimbabwe**

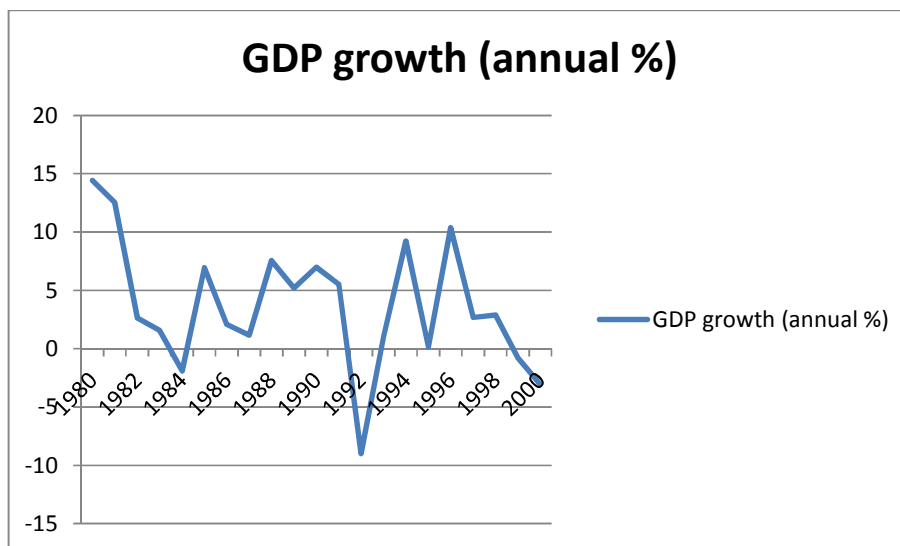
The agricultural sector is the second highest contributor to the country's export earnings, and it is generally accepted that there is a strong correlation between the performance of the sector and that of the economy as a whole (Kanyenze, et al., 2011). The importance of agriculture in Zimbabwe is twofold; not only as a foreign currency earner but also as a means to ensure that the country has food security by way of its many communal farmers (Marquette, 1997) . Economists have highlighted that although there are many factors that have had a bearing on the decline of agriculture (which include the contentious land redistribution program, and the year on year decline in levels of rainfall and drought), the decline of agriculture has its roots in systemic issues that are a legacy of post-colonial policies made to address the issues of redress during that time as well as policies implemented as part of the Economic Structural Adjustment Program. (Kanyenze, et al., 2011)

The importance of the agricultural sector has been of particular importance since colonial times, as the country did not have the mineral deposits that would make it a prime mining hub such as South Africa, and this realization together with the crashing of the Johannesburg Stock Exchange in 1901 led the white settlers to turn to agriculture as an economic means (Kanyenze, et al., 2011). Following a lengthy liberation struggle Zimbabwe gained its independence in 1980, inheriting a country with an inequitable distribution of wealth, particularly in the agricultural sector, where large productive commercial farms were primarily white owned and the lack-luster communal land on the fringes being allocated to the black people who farmed mostly for subsistence (Abalu, et al., 1996)

Following independence, the country needed to rebuild infrastructure and address the imbalances that had been caused by a prolonged period of colonial rule (Sichone, 2003). These efforts were widely supported by the more economically developed countries, with many offering financing in the form of aid and concessional loans. In this period the country increased expenditure on social welfare with the aim to rectify the unequitable distribution of wealth in the country. In addition to increasing spending on social welfare, the government channeled funds towards smallholders/communal farmers in a bid to encourage them to

produce not only for their own consumption but for sale to the markets. During the 1980's, the government's efforts were fruitful, with small holder farmers becoming the largest suppliers of maize and cotton from 1980 to 1985 and export earnings increasing in the second half of the decade as commercial farmers production increased (Economic and Social Development Department, 2015).

The high levels of spending on social welfare in the 1980's by the government as well as the Zimbabwean military's involvement in the conflict in Mozambique resulted in the government's budget becoming very strained, with Zimbabwe's involvement in Mozambique costing up to 10% of the country's GDP each year (Marinakis, et al., 1993). Although the growth rate of the country during this period was over 5% on average, this was not able to sustain the amount of funding being channeled into the government interventions in the different sectors of the economy.



**Figure 2: GDP Growth Rate**

Source: World Bank Economic Indicator Database

As the graph above illustrates, from independence in 1980 the Zimbabwean economy's growth rate was declining year on year, reaching its lowest in 1984. At this stage, the Zimbabwean government undertook to take a more liberal approach to macroeconomic variables, making efforts to cut government spending and to liberalize the exchange rates and

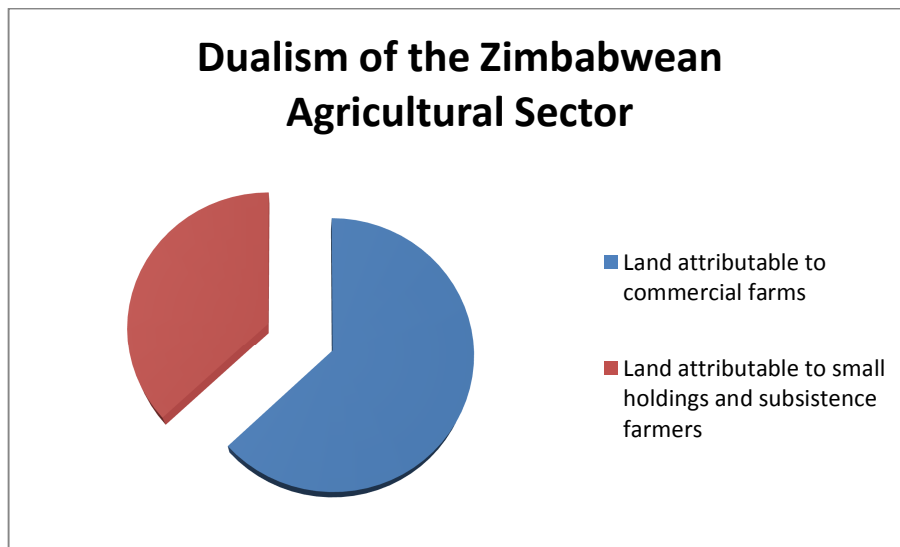
decrease the control it had on investments and import and export regulations. The aim was to encourage growth by increasing exports in the country's key industries, manufacturing and agriculture. This led to an improvement in the country's growth rate, and this as well as the increasing pressure from the international investors to run its government more efficiently and to take a less protectionist stance on the led the government to embark on the Economic Structural Adjustment Program which was announced in October of 1991. The program was intended to encourage competitiveness and ultimately lead to the growth of the economy in the medium to long term through an increase in productivity and an increase in revenue from exports. (Davis & Rattso, 1996)

### **2.7.1 Dualism of the sector**

Before its independence in 1980, the agricultural sector in Zimbabwe was characterized by its 'racially skewed' structure, with primarily white farmers owning the large commercial farms in the most fertile land and the indigenous rural population being allotted the marginal and infertile land in 'Tribal Trust Lands'. Following its independence, in a bid to address the racial bias in land ownership whilst keeping sight of the large role that subsistence farming had on the economy, the Rhodesian government started awarding black farmers small scale farms. These farms could provide the livelihoods and employment opportunities that the marginalized lands could not (Kanyenze, et al., 2011)

Despite efforts to address this through land redistribution programs funded by the Zimbabwean and British Governments, little has changed, with the Food and Agriculture Organization asserting that the most outstanding characteristic of the Zimbabwean agricultural sector is the lines along which the sector is separated, i.e. small holdings and the larger communal farms (Food and Agriculture Organization, 2003)





**Figure 3: Dualism of Zimbabwean Agricultural Sector**

Source: (Food and Agriculture Organization, 2003)

The graph above shows the portion of land attributable to commercial farms relative to that attributable to small holdings and subsistence farmers. According to the Food and Agriculture Organization, of the 33.3 million ha of land for agricultural use, 21million ha are occupied by subsistence farmers, whilst the remaining 12million ha are owned by communal farmers (Food and Agriculture Organization, 2003).

In the early 1980's, the allocation of small scale farms to skilled black farmers, and the support they received from the Agriculture Financing Commission ( AFC) resulted in their increasing production becoming net producers of maize, cotton and tobacco from being in a position of being net consumers (Kanyenze, et al.,2011)

### **2.7.2 Climate Change**

Climate change has also significantly impacted the current state of the agricultural sector in Zimbabwe. As previously mentioned, the Zimbabwean economy is agro based. Further distinction can be made of the agricultural sector in the country in that it is mainly rain fed agriculture. As such, the sector is highly vulnerable to climate change (Kanyenze, et al., 2011). Mano and Nhemachena (2007) in their research on the effects of climate change on the agricultural sector in Zimbabwe ran simulations to find the financial impact of drought on agriculture's contribution to GDP. They found that a 2.2 degree increase in temperature

would lead to a decrease in revenue in the sector of US\$0.4 billion for farms with no irrigation; conversely, farms with irrigation would note an increase in revenue of US\$0.3 billion. In all the simulations that they ran, an increase of temperature would result in an overall decrease in revenue for the sector of between 10% and 30% (Mano & Nhemachena, 2007)

The majority of the population of Zimbabwe is dependent on subsistence farming for their livelihood (Food and Agriculture Organization, 2006). Irrigation in these circumstances is not accessible due to financing constraints, or the lack of a large enough water source. This is largely due to the colonial legacy of dualism in the sector where the large commercial farms were located in the most fertile areas close to large water sources such as dams, whilst the Tribal Trust Lands were largely located in marginalized lands in areas with soils that were not as fertile and a long distance from water sources. The pressure on the Tribal Trust Lands was further exacerbated by the large concentration of people per square kilometer in the area, putting pressure on the natural resources (Kanyenze, et al., 2011)

Marquette (1997) says that in the context of ESAP's implementation in Zimbabwe, climate change is also particularly important as there was a major drought in Zimbabwe in 1992 which coincided with the start of the adjustment period and may have delayed the implementation of some policies (Marquette, 1997) This is important to note as the agricultural sector was possibly the most affected and any effects of the drought would continue to be felt in the medium term and would have a material impact on the intended outcomes of ESAP.

### **2.7.3 Land redistribution**

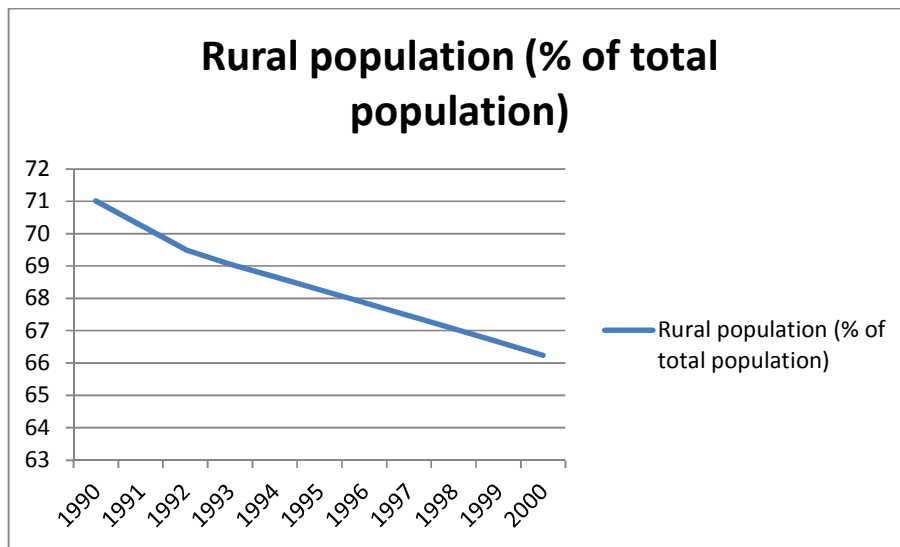
In assessing the effects of ESAP on the agricultural sector in Zimbabwe, it is also important to consider land redistribution policies and effects leading up to and during the period under considerations as it affected land ownership and productivity. The Lancaster House Agreement signed between the British Government and the Zimbabwean Government, included a clause that stated that within 10 years of independence, the government must institute a willing buyer, willing seller policy in order to purchase land held by white farmers at a fair market price (Kanyenze, et al., 2011). The principle of this basis was that the land owner had to be willing to sell the land at a price agreed upon between themselves and the government. The Zimbabwean government was also happy to comply with this stipulation as

the primarily white owned commercial farms were the anchor of the economy through their contribution to the country's GDP and export earnings (Kanyenze, et al., 2011). Between 1980 and 1992, 3.5 million ha was purchased and re-allocated to black farmers. This is in part what led to the increase in budgetary pressure as the state became the buyer of first resort for any land out on the market (Kanyenze, et al., 2011; Anseeuw, Kapuya, & Saruchera, 2012)

Because of this 'protection' offered to large scale commercial farms, they were able to continue with no disruptions to their business running's and the economic contribution during this time remained strong. From a financing stand point, the large commercial farms were also at an advantage as the Agricultural Finance Corporation channeled more funding toward infrastructural development for these large farms in the form of dams and irrigation, largely due to the influence of its major lender, The World Bank. Kanyenze et al (2011) highlight the vulnerability of the small holder sector to Climate change, going on to specify that the small holdings are most vulnerable not only due to factors mentioned in the section on climate change, but also due to land redistribution policies and funding that are a legacy of colonial times and post-independence attempts to address it (Kanyenze ,et al., 2011)

#### **2.7.4 Employment creation and income potential**

Agriculture is one of the biggest employers in Zimbabwe, with over 65% of the population being dependent on agriculture for their livelihoods (Kanyenze, et al., 2011). Studies by the World Bank and the Food and Agriculture Organization (FAO) found that there was a strong correlation between the performance of the agricultural sector and the performance of the economy as a whole (World bank, 2008). The graph below shows the size of Zimbabwe's rural population relative to its total population from 1990 to 2000:



**Figure 4: Rural Population**

Source: World Bank Data bank

Takupiwa Nyanga (2013) highlights in his paper on Agriculture as an employment creation tool, that the agricultural sector is an antecedent to employment, the reduction of poverty and ultimately sustainable development. He proposes that since agriculture is a major contributor to the economy through the provision of raw materials to industry and forex earnings, it is a means towards achieving sustainable development (Nyanga, 2013)

This view is supported by Maiyaki (2010) who notes the rise of Agri-business in Zimbabwe since the early 1980's. He credits this to the high earning potential of the growing of cash crops such as tobacco and horticulture for exports, as well as supportive government policies. He highlights the fact that Zimbabwe had one of the most extensive agro-processing capacities until early 2000, crediting this to the country's industrialization and cross linkages between the agricultural and industrial sectors (Maiyaki, 2010). Kanyenze, et al (2011) highlight the importance of agriculture not only through its direct contribution to the GDP, but also through its backward and forward linkages with other manufacturing sector. In the mid 1990's, over half of the inputs into the agricultural sector came from manufacturing, and over 40% of the raw materials used in the manufacturing sector came from the agricultural sector (Kanyenze, et al., 2011)

The concern among many development agencies and social scientists is that ESAP policies were too economics oriented and failed to take the social impacts of the implementation of the policies into account (Marquette, 1997). Heidhues and Obare (2011) highlights that although the IMF and World Bank recognized the importance of the social aspects related to ESAP policy implementation, they maintained that these policies as well as export led growth were what would ensure the economic development of the region (Heidhues & Obare, 2011). The liberalization of the sector and the removal of protectionist policies had the unintended outcome of leaving the ill-equipped subsistence farmers who were mainly made up of the rural population, vulnerable to international competition.

There have been various articles and research undertaken to try to understand how Zimbabwe transformed from one of the most productive nations in Sub Saharan Africa to one of the poorest in the region. Academics on different sides of the argument agree that it was a combination of environmental factors, economic sanctions and the contentious land reform program. Jos Martens points out that this was in part what led to the erosion of the country's food security. He points out that in addition to that, the policies implemented as part of the Economic Structural Adjustment Program also contributed to this through incentivizing farmers to move away from production of cereal crops toward high value cash crops for export (Martens, 2012)

Following the country's independence, the country's agricultural sector was financed primarily through the Agricultural Finance Corporation which fell under the oversight of the Reserve Bank of Zimbabwe. The focus of this corporation was to support the new small holder farmers through access to financing at affordable rates. Jansen and Rukovo (1992) estimate that in 1985-86 it provided 100 000 small holder communal farmers with funding which led to an increase in their production to over 45% of the market maize (Jansen & Rukovo, 1992). The focus of the AFC on small scale farmers meant that commercial farms only source of funding was through the commercial banks. The commercial banks, however, were hesitant to lend to these farmers due to property rights concerns that were prompted by the nationalization of land and land redistribution which rendered the collateral a poor form of security (Anseeuw, Kapuya, & Saruchera, 2012)

Despite the financing challenge however, research has shown that communal farmers are economically better off due to their opting for high value cash crops for export rather than

cereal food production. As a direct result of this, the country is also better off from an economic and balance of trade stand point. Furthermore, they are in a better position to take advantage of policy reforms that benefit the sector as their focus is revenue generation and profit maximization rather than the provision of food and selling of whatever little excess there is for other day to day needs as is the case with the small holders and subsistence farmers (Kanyenze ,et al., 2011)

#### **2.7.5 Zimbabwe's Policy Environment Prior to ESAP**

As highlighted by Marquette (1997), the Zimbabwean government had already started making strides towards liberalizing areas of the economy to encourage growth before the adjustment period started. These efforts were aligned to the country's need for growth whilst cognizant of the social responsibility of the government. When the country embarked on the adjustment program, the intention was to take a further step toward this goal (Marquette, 1997). The results of the adjustment policy have been the subject of debate for years, with the overwhelming consensus being that the social aspect of development failed to be given due recognition and accommodation in policy formulation (Heidhues & Obare, 2011)

In their paper on Food and Input Market Reform, Jayne et al (2011) concede that despite researcher's best efforts, the results of research into the effectiveness of policy implementation in the region as part of ESAP is very mixed. On the one end some academics find that policy reform and implementation was successful and the improved liberalization led to an increase in private investment in the agricultural sector. On the other end, opponents of this view who have researched the same concept over the same period of time, find that results point towards policy implementation failure. The disparity in results can be largely attributed to the heterogeneous nature of the policy implementation environment across the region (Jayne et al, 2001). The institutions in developing African countries are weak, and this is exacerbated by weakness in the legal system pertaining to the business environment. This poses a challenge to the policies recommended under ESAP which have a neo-liberal bias whose underpinning foundation is the efficient working of the market in the absence of government intervention. The lack of an environment that enables business to operate efficiently in African countries is a challenge that the policy formulators did not take into account (Heidhues & Obare, 2011) In addition to the above, Kapuya et al (2010) cite poor infrastructural development as a cause for concern as it hinders the marketing of agricultural

produce and decreases overall capacity for production, leading to escalating costs and a scarcity of production factors (Kapuya et al, 2010)

The policy environment in Zimbabwe, is largely inconsistent due in part to inefficiencies in government departments as well as conflicts of interest between the economic agenda of economic growth and further development and the burden of responsibility the government carries toward civil society among other things. Some policies are drawn up but never authorised by government, such as the whilst others are subject to 'log rolling', the exchange of favours for reciprocal voting on legislation between ministers. The result is policy changes occurring each time there is a policy maker with a different agenda (Jayne, et al., 2001)

The lack of accurate and up to date statistical information is also a challenge that developing countries face. It is difficult to formulate and recommend policies in the absence of good quality data and information. Furthermore, it is imperative that data be accessible for the sake of measuring cause and effect relationships of policies implemented as well as measuring progress made. The lack of statistical information posed and continues to pose a real challenge to policy makers, with some information being inaccessible due to its being classified a 'threat to national security' by the Zimbabwean government (Anseeuw, et al., 2012). The United Nations Development Policy (2008), has found that increasingly, data is also being manipulated to suit the varying purposes of the Zimbabwean government with the result being an inconsistent view of the reality. (United Nations Development Programme, 2008)

Kanyenze, et al (2011) are of the view that all countries need a level of protection in their economies in the early stages of their development, and it can be argued that Zimbabwe's protectionist stance on its economy prior to ESAP was no different to the United States of America and the United Kingdom during the Industrialisation Period (Kanyenze, et al., 2011). Despite this, the increasing budget deficit and a stagnating growth rates indicated that the country would need to look outside of its own borders to boost its economy. As previously mentioned, Zimbabwe had started to take steps towards taking a 'lighter touch' approach to the economy, devaluing the Zimbabwean dollar and implementing Export Retention Schemes to encourage producers to grow for the more lucrative export industry

among other efforts. Elizabeth Asiedu (2004), however, asserts that despite an improvement in the policy environment as a result of increased privatisation through liberalization of the economy, countries in Sub-Saharan Africa have continued to struggle to compete in the global economy. She highlights that this is an indication that it is not enough to improve the policy environment in Africa, but rather the improvement should be measured both in real terms and in relative terms to the rest of the world (Asiedu, 2004)

One of the major challenges faced by the policy environment in Zimbabwe is not only the implementation of the policies as highlighted above, but the formulation of the policies themselves. Anseeuw, et al (2012) highlight that policy formulation in the country is largely reactive as opposed to proactive and it is not aligned to the country's long term plan. Policy formulation is on an adhoc basis, often being proposed in reaction to an event such as drought or civil unrest. They go on to emphasize that the implementation of the policies formed is very inconsistent, and highly dependent on political stances and appointments within the ministries concerned, the being there was no formal agricultural policy in place and the policies that were in place weren't implemented as envisioned largely due to a poorly established institutional framework as highlighted above. (Kapuya, et al., 2010; Anseeuw, et al., 2012)

## **2.7 Implementation of Structural Adjustment on the Agricultural sector in Zimbabwe**

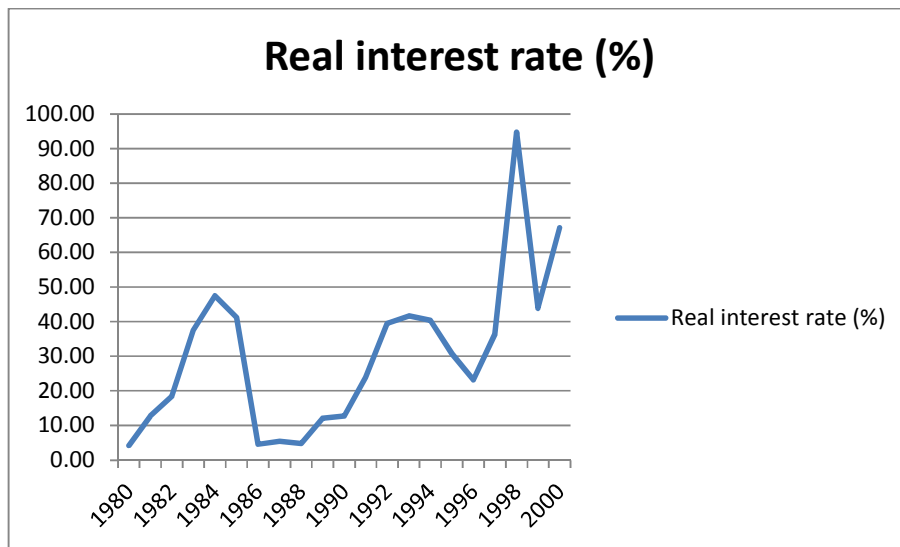
Whilst the Economic Structural Adjustment would not have a direct bearing on the policy environment, the hope was that the policy recommendations made as part of the program would incentivize the emergent market players together with the government to fundamentally change the institutional integrity and policy environment which would in turn create an enabling environment for the agricultural sector. The policy recommendations in respect of Zimbabwe were intended to achieve a number of objectives, with the overarching aim to liberalize the economy. Among these was to be the better management of parastatals and government departments so ensure they ran more efficiently. This was to be achieved by stripping away all non-core functions and assigning these to the private sector that could do these more efficiently. Heidhues and Obare (2011) in their paper on the lessons from SAP in the Journal on international Agriculture highlight that one of the perceived key problems of African countries was the poor management of state departments and parastatals, which in turn led to poor investment choices, with capital/funds being allocated inefficiently (Heidhues & Obare, 2011)



The removal of pricing controls and putting a stop to the provision of subsidies to the agricultural sector was also a recommendation made as part of ESAP. The underlying premise was that the former hindered market efficiency and created an environment that didn't encourage efficient production and where social expenditure was wasteful as most of the recipients did not 'need' it e.g. commercial farmers (Kanyenze, et al., 2011). The removal of pricing controls and the lifting of restrictions on trade was intended to allow foreign participants into the economy and to encourage economic growth through efficiencies arising from increased competition and the efficient allocation of capital as a result (Anseeuw, Kapuya, & Saruchera, 2012). To this end, the Zimbabwean government reduced the number of Marketing Boards to allow agricultural producers to sell directly to markets.

At the onset of the structural adjustment period, the country had high negative real interest rates which resulted in an increase in inflation. This was made worse by the drought in 1992 which pushed up the rate of inflation due to decreasing agricultural productivity (Marquette, 1997). From 1992, there was a concerted effort to remedy the situation by making access to credit more difficult which would push up the rate leading to highly positive interest rates. It must be noted however, that during this time, interest rates were not a good measure of monetary policy as they were subject to manipulation by the government through the Reserve bank of Zimbabwe. During 1993, the central bank gave up control of the interest rate and allowed it to float freely in a bid to liberalize the financial markets (Abalu, et. al., 1996; Anseeuw, Kapuya, & Saruchera, 2012).

The graph below shows the real interest rate from independence in 1980 to the end of the period under review, 2000:



**Figure 5: Real Interest Rate**

Source: World Bank data

The results of the above on the agricultural sector was an increase in the cost of borrowing from commercial banks which made acquisition of raw materials difficult and the meeting of loan payments a challenge. Naturally this drove commercial farmers toward the more lucrative export market which was heavily supported by the Central bank and external stakeholders. In 1990, the Reserve Bank of Zimbabwe together with a group of banks based in London set up a US\$20 million facility to be used for the promotion of horticultural production for export. The fund was renewed in 1992 with another US\$20 million. The above naturally benefitted the large commercial farms that were involved in the export market rather than the small holders (Moyo, Land Reform under Structural Adjustment in Zimbabwe, 2000)

In the early 80's, there was a concerted effort by government to make the best of the dualism of the agricultural sector that they had inherited, whilst channeling more funding and support to assist small scale black farmers. In addition to this, there were funds being channeled towards the land redistribution program, which at the time was operating on a willing buyer willing seller basis with Land being purchased by the government at Market Value. Naturally this level of state spending wasn't sustainable, with the government of Zimbabwe reaching crisis levels towards the end 1989 (Kanyenze, et al., 2011)

At the beginning of the adjustment period the country had a budget deficit of 11% largely due to growth rates that could not sustain the level of government expenditure. The government's aim at the onset of the program was to reduce this to a 5% deficit by the end of the adjustment period in 1994/95 by way of a gradual decline in the government expenditure whilst also lowering the tax burden on the citizens (Abalu, et al., 1996)

Whilst the aim of government was to reduce its expenditure, they wanted to maintain infrastructure and support for the poor through better targeted subsidies. They undertook however to do this by creating an enabling environment rather than direct intervention in the pricing and marketing of goods. Unfortunately, the cut in government expenditure came from the capital portion of the spend, which adversely affected the agricultural industry and in later years was blamed for the poor state of infrastructure in Zimbabwe (Abalu, et al., 1996; Kanyenze, et al., 2011)

Leading up to 1991, the Zimbabwean dollar was highly over-valued, with the government defending the currency against devaluation by rationing forex and imposing trade restrictions. Adjustment in this respect involved moving towards a more flexible exchange rate system where the market dictates the prevailing rate. The government aimed to achieve this by starting the Export Retention Scheme (ERS) which allowed exporters to retain a portion of their export earnings where previously they could not. Initially producers could only retain 7.5% of their net earnings but by 1992 the retention had risen to 30% and 50% in 1993. This scheme was instrumental in providing the agricultural sector with foreign currency which they could then use to import raw materials. It also served as a further incentive to move towards the growing of export crops. In a bid to further encourage the export of goods, agro-industrial projects that were approved by the Zimbabwe Investment Center had import tax and customs duty on imported capital goods waived. (Abalu, et al., 1996; Moyo, Land Reform under Structural Adjustment in Zimbabwe, 2000)

Soon after independence Zimbabwe became party to the Lomé convention and became a member of the African, Caribbean and Pacific countries group (ACP). This allowed the country to benefit from preferential trade partner status that ACP had from the European Union countries. Zimbabwe benefitted immensely from this, and between 1980 and 1997 was one of the most successful ACP countries in leveraging the preferential trade agreements, exporting large quantities to the EU. (Maiyaki, 2010)

The agricultural sector's largest exporters were horticulture (fruit and vegetables) and flowers. In a bid to encourage the agricultural sector to take advantage of the export opportunities that existed, the Zimbabwean government set up Export incentive Schemes as part of the reform process. These schemes included Export Retention Scheme highlighted in the section above. The result was the agricultural sector accounting for over 50% of exports to the EU between 1992 and 1996. (Moyo, Land Reform under Structural Adjustment in Zimbabwe, 2000; Maiyaki, 2010)

As part of the reform process, trade associations were allocated a forex budget each season to assist with the import of agricultural inputs, whilst input producers had to be registered to limit competition. The objective of this policy was to improve the nation's food self-sufficiency; the result was the government's heavy involvement in production of cereal crops such as wheat, despite this not being the country's competitive advantage or having the highest earning potential. Maiyaki asserts that a level of trade protection is important for developing countries to be protected against unfair international competition. (Jayne, et al., 2001; Anseeuw, Kapuya, & Saruchera, 2012)

One of the main aims of the government was to reduce intervention in the marketing and pricing of goods by stripping the marketing boards of non-core functions that could be done more efficiently by other players. The result was an opportunity for increased private sector involvement, which helped to grow the agricultural sectors export earnings potential. Unfortunately, Chattopadhyay puts forward that Structural Adjustment and the removal of this government intervention led to an increase in poverty levels (Chattopadhyay, 2000; Staatz & Dembele, 2008)

### **2.7.1 Chronology of reform process in Zimbabwe (1990-2000)**

**1991** – The Zimbabwean Government announces the Economic Structural Adjustment Program, highlighting that their agreeing to the recommendations therein is underpinned by the objective of food security, increasing employment, and increase in exports and sufficient production for the provision of raw materials for the manufacturing sector.

The Government also announced the intention to restructure the agricultural marketing boards in order to improve efficiency and to put a stop to activities that were not core to the mandate of the board and could be privatized. This was a move towards a more liberal market

where price controls and subsidies were no longer controlled and the producer prices were linked to world prices of agricultural commodities (Kanyenze, et al., 2011)

The Zimbabwean Government introduced the Export Retention Scheme which allowed exporters to retain 7.5% of their earnings.

**1992** - The government continued with plans to make agricultural marketing boards scale back on functions that could be privatized, thus allowing more competition and reducing the monopoly power that the board had (Abalu, et al., 1996)

During the same year, the Land Acquisition Act was introduced in a bid to speed up the resettlement process as the 10 year grace period for white owned commercial farms that was granted as part of the Lancaster House Agreement has expired.

The Export Retention Scheme was introduced, where exporters could retain a portion of their export earnings, where previously they could not. This was a bid to incentivize production for export which would improve export earnings in the country. The scheme was most welcome to large commercial farms who turned their attention to horticulture and the production of non-food crops such as tobacco and coffee which had high export value (Anseeuw, Kapuya, & Saruchera, 2012) (Kanyenze ,et al., 2011)

The retention under the ERS increased to 30%

**1993** – The Central Bank allowed for the interest rates and exchange rates to float freely and put a stop to interventions to defend the currency and manipulate the interest rate.

The retention of exports earnings under ERS rose to 50%

By June, individuals were allowed to convert their foreign currency freely.

During the same time, controls on the price of maize by the Grain Marketing Board were progressively eased. Large scale retailers and millers however, were still obliged by the law to use the GMB as their primary supplier of maize (Anseeuw, Kapuya, & Saruchera, 2012)

**1994** – The controls on maize prices were completely removed. The two tier pricing system was abandoned and the prevailing price was determined by market forces.

Despite this, the GMB remained the only legal importer and exporter of maize in order to maintain slight control over the crop and protect smallholders.

Prior to the measures introduced as part of ESAP, Zimbabwe had a two tier exchange rate system, with one rate used for banks to lend and borrow between themselves and the other rate operating parallel to this one being the rate in the market. In 1994, the two rates were unified, and this allowed for the true value of the Zimbabwean dollar to prevail and the currency fully convertible in the international market.

Exporters permitted to retain 60% of earnings in foreign accounts, by July this had increased to 100%

#### **1995 – The last year of ESAP**

The Ministry in charge of agriculture drew up a National Policy Document with the hope that it would be formalized and would inform policy and strategic decisions in the government as well as within the Ministry. The document was never formalized; however it was used to inform policy decisions within the Ministry.

**1996** – The AFC founded in 1971 to support infrastructure development and operations for large commercial farms, was transformed to Agribank. The new commercial banks mandate was to extend credit to the communal farmers, commercial farmers as well as the large commercial farms (Kanyenze ,et al., 2011)

**1998** – Initially, as outlined in the Lancaster House Agreement, the purchase of land by the government was to be on a willing buyer-willing seller basis, with land being purchased at Market Value. This was to be funded by the British Government together with the Zimbabwean Government. When the Tony Blair was elected as Prime Minister of the United Kingdom, he put a stop to this and the land redistribution program ground to a halt, leaving many frustrated. (Kanyenze ,et al.,2011)

In 1998, the second phase of the land redistribution program was announced. The Zimbabwean government called a Donor conference to inform the donor community attended by 48 countries and international organizations. The decision and proposed implementation plan was unanimously endorsed because of potential for poverty reduction, political stability, economic growth (Anseeuw, Kapuya, & Saruchera, 2012)

During the same year, the Zimbabwean dollar depreciated against the stronger currencies and the government reintroduced pricing controls on maize. The Grain Marketing Board increased the price of maize by 21%, with the increase being passed on directly to consumers leading to unrest.

**2000** – The Grain Marketing Board reintroduced the 2 tier pricing system, with a lower price being offered to large commercial farms and a higher price for all other players.

## **2.8 Conclusion to Literature Review**

As highlighted in the literature discussed above, much research has been done on the effects of ESAP on low income countries. The effects don't take into account the consistency of policy implementation however, and this highlighted an area where this research could shed more light. The importance of the agricultural sector in Africa was then discussed in order to highlight the magnitude of the impact that any policies affecting the sector would have on the regions socio-economic development. The agricultural sector emerged as a means for the majority of the population to access other basic services such as education and healthcare in addition to contributing to the country's GDP and economic growth. This considered with the history of ESAP provided a rubric against which to measure the solution, ESAP, against the pressing needs of the region which broadly speaking is development.

The complexity of the agricultural sector and the role it plays in Zimbabwe further gives context to the research area, highlighting the socio-political challenges that plague the policy environment in the country as a challenge. This is of particular importance because of the importance of agriculture in the country which has a rural population of over 60%. The application of structural adjustment policies in Zimbabwe was further complicated by the severe drought in 1992 and the contentious issue of land which was ongoing throughout the adjustment period. The latter meant that the implementation of ESAP policies may not have been as consistent as assumed and due to a lack of understanding of the broad aims of the program by the people of Zimbabwe, a number of economic failings may have been attributed to the program. In order to establish this, this research therefore considers the direct effects of ESAP on the agricultural sector in Zimbabwe and to goes a step further and considers the consistency of application of policies in the thematic analysis.

## **CHAPTER 3: RESEARCH METHODOLOGY**

### **3.1 Research approach and strategy**

A qualitative approach was used in this research.. This focused on the interpretation of data as opposed to the statistical collection and analysis of the data. This characteristic has been raised as a shortcoming of qualitative research, with opponents citing that little attention is paid to the actual process of researching, with the quality and maturity of the research being positively correlated to the level of quantification in the research (Lincoln, 1994)

For the sake of achieving the objectives of this research, this strategy seemed the most appropriate, as the emphasis is on the identification and analysis of themes that emerge from the Zimbabwean case by considering a number of different variables as identified in the literature review. Daly et al (1997) assert that this type of thematic analysis involves identifying themes that emerge and this is particularly important for describing the phenomenon, in this case being the effects of ESAP on the agricultural sector in Zimbabwe (Daly, Kellehear, & Gliksman, 1997)

To ensure that the data used to identify the themes is reliable, and the themes identified are robust, the researcher made sure to use data from databases that have passed the test of data integrity. They include data from The WB Country Data Base, FAO, the IMF and ZIMSTAT. Using data from these databases ensured the integrity of the research findings and conclusions was maintained throughout the research process.

### **3.2 Research Design**

This research took the form of a case study by specifically looking at Zimbabwe's agricultural sector to determine the efficacy of previous research findings on the effects of SAPS in Zimbabwe. Goddard and Melville define case study research as research in which a specific situation is studied to see if it puts forward any theories (Melville, 1996). John Gerring (2004) provides a more succinct definition of a case study, describing it as 'an intensive study of a single unit with an aim to generalize across a larger set of units' (Gerring, 2004). One of the advantages of using a case study, as Robert Yin (2014) highlights, is that it is flexible and can be either exploratory, descriptive or explanatory. Therefore the relationship between the different types of case studies, is not hierarchical but rather each meets different objectives depending on the aim of the research (Yin, 2014). Thus, it provides an enormous level of flexibility for research of this nature although it has been criticized by



Skate (1995) as stated in Bergen and While (2000) that one case is a poor basis for generalization and the formulation of new theories (While & Bergen, 2000). In this case however, the objective was not discover new information or new outcomes, but rather to refine our understanding of the effects of ESAP beyond the input –output relationship of the policies (While & Bergen, 2000)

The aim of this research paper was to describe the impacts of the Economic Structural Adjustment Program on the agricultural sector in Zimbabwe whilst investigating the consistency of policy implementation simultaneously. The type of Case Study analysis conducted is therefore descriptive. The researcher took an inductive approach, starting with observations from the thematic analysis of the Zimbabwean case to arrive at a set of postulates about low income countries in Sub-Saharan Africa.

Initially the researcher's intention was to consider the adjustment policies that were implemented and their effects on the agricultural sector, essentially an "input vs. output" formula. After reading the literature surrounding the extensive research that has been done on the topic however, it became clear that the underlying assumption that the policies recommended as part of the Structural adjustment program were implemented in totality for the duration of the adjustment period was in and of itself a limitation of previous research attempts. Building on this, the researcher subsequently chose to not only look at the effects of the policies implemented, but also the extent to which the recommendations were in fact implemented.

### **3.3 Data Collection, Frequency and Data Choice**

In analyzing the Zimbabwean case, the researcher used secondary data primarily from the WB country data base. Because the ESAP policies were driven by the WB and IMF, the research made use of data from the FAO, and ZIMSTAT to offer a balanced view of the real outcomes of the policies implemented. Data used was over the period 1990-2000. The motivation for this time period being that it encompasses the adjustment period 1991-1995 as well as some time after to fully assess the medium to long term effects of the market reform policies recommended. In order to assess the effects of the policies implemented for the time period under review, a number of indicators were used.

The criteria used to select the data on which a thematic analysis would be conducted were largely dictated by the findings in the literature review. The intersection between the policies

implemented as part of ESAP and those that would have a direct effect on the sector is what the researcher chose to consider, together with other important variables that would naturally have a material cause and effect relationship with the sector such as rainfall and the amount of land under agricultural production. Each indicator is described below and its significance in this research with the guidance of the World Bank Data Bank indicator explanations.

### **Agricultural Imports and Exports**

This is an indication of all the agricultural goods that are imported from other countries or exported to other countries. The comparison of these two gives an indication of the agricultural sectors 'balance of trade'. In the context of this research, this is important as it will give an indication as to whether at a high level ESAP achieved its objective, i.e. an increase in exports in the sector to drive the growth of the economy.

### **Percentage of Agricultural land**

This statistic refers to the area of land that is under permanent cultivation. In considering the outcome of the policy recommendations made as part of ESAP, it is worth noting this indicator in any increase in gross domestic product from the sector, as whilst a portion will be attributable to the success of adjustment policy implementation, a portion is also attributable to an increase in land under cultivation as found by the study on Sub-Saharan Africa by the World Bank report on Strategies for Sustained Growth and Inclusive Development in 2008 (World bank, 2008)

### **Crop Production Index**

This is an indicator of the total production of crops by the agricultural sector. The data I will be using from the World Bank Data base uses 2004-2006 as a base. Given that the time period we are looking at precedes this, the trend line of the data will be simple to determine and the data is comparable.

This indicator is of importance as another of the objectives of ESAP was to increase productivity through an improvement in levels of efficiency in the market by a reduction in government intervention.

### **Rainfall led production**

This indicator compares the trends in rainfall and in agricultural production over the period under review. It provides an indication of how strong the relationship is between rainfall and agricultural production in Zimbabwe, which may be helpful in explaining trends in productivity in times were ESAP driven policies were being implemented, but the outcome in the sector was not desirable. As highlighted in the literature review, agriculture in Zimbabwe is primarily rain fed, which makes rainfall pattern an important factor to consider in identifying themes.

### **Food Production Index**

This indicator is a more specified version of the crop production index. The difference is that it doesn't only look at the production of all crops, but rather only those that are edible. It is particularly useful when considering the issue of food security and the progress the country has made towards meeting its Millennium Development Goals.

As highlighted previously, there are more small holdings in Zimbabwe than Communal farms, and in addition to this, communal farms with a profit maximization motive are more likely to pursue high value cash crops than food crops. This indicator is able to shed some light on the social issues surrounding food security, agriculture and economic value- add. Furthermore, as highlighted by Marquette (1997), food security was highly prioritized by the government, even during ESAP, which is why the ceiling on the price of maize, Zimbabwe's staple, remained throughout the adjustment period (Marquette, 1997).

### **Agriculture Value Added (% GDP)**

This is a measure of the productivity of the agricultural sector. The productivity is measured as the value of the output less the value of the inputs. This measure includes value from forestry, hunting and fishing, however it is was useful in drawing themes of the agricultural sector as a whole.

## **3.4 Data Analysis Methods**

As discussed above, the indicators above attempt to provide a view of the agricultural sectors performance in any given year with regard to key variables highlighted above, e.g. production of crops measuring overall productivity of the sector and production of food crops , which narrows the productivity to productivity specifically focused on food security.

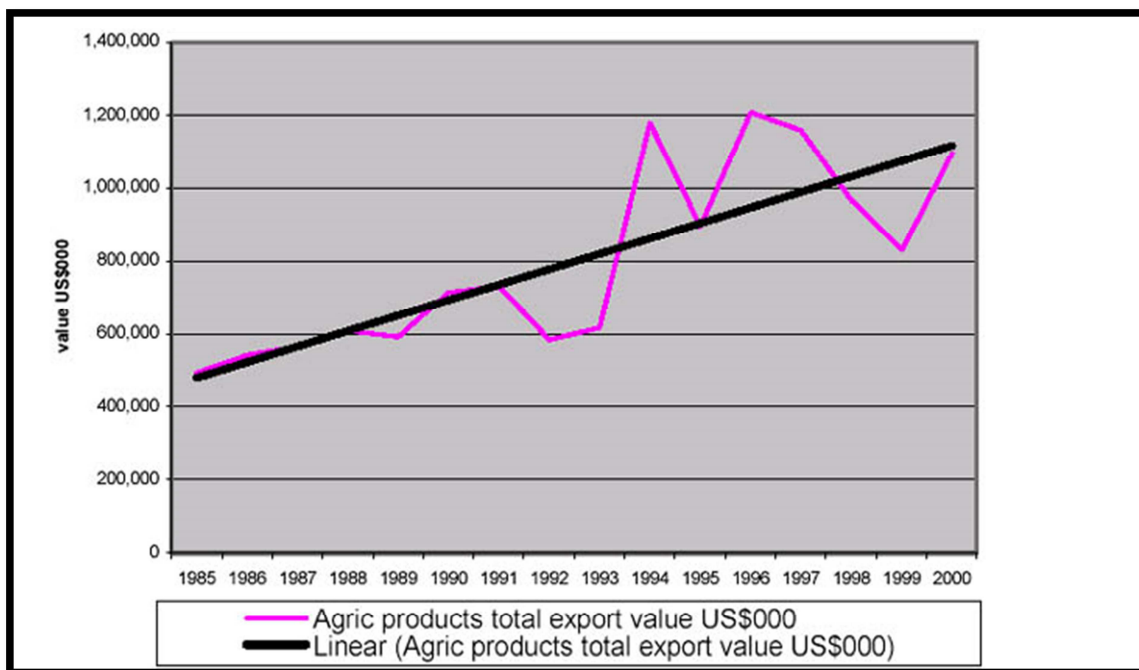
Given the objectives of ESAP regarding the agricultural sector, the indicators above were analyzed over the time period 1990-2000 in an attempt to highlight any patterns/trends, whilst isolating key events in the adjustment time line relating to policy changes and implementation as well as external factors that may have had a material effect on the outcomes.

The conclusion will take these trends as well as the discussion surrounding the key events over the time period under review and conclude as to the effects of ESAP on the agricultural sector in Zimbabwe.

## **CHAPTER 4: RESEARCH FINDINGS, ANALYSIS AND DISCUSSION**

### **4.1 Agricultural Exports**

Given that the focus of ESAP was to encourage export led growth in Zimbabwe, this indicator is expected to have increased over the ESAP period at least, i.e. 1990-1995. Taking the export retention scheme into account and its gradually increasing allowance, the expectation is strongly supported by the policy recommendation and its consistent implementation. The graph below depicts the actual agricultural exports over the period.



**Figure 6: Agricultural Exports**

Source: (Food and Agriculture Organization, 2003)

The adjustment period started off with a slight decline in agricultural exports as a result of the drought in 1992/3 which also decreased agricultural productivity levels. Following this however, the sector promptly rebounded, with exports from the sector increasing steadily reaching their peak over the period in 1994. This sharp increase was followed by another noticeable decline as the adjustment period came to an end in 1995. The sectors exports again rebounded. As expected, the general trend line is upward sloping, which is expected given the devaluation of the Zimbabwean dollar throughout adjustment period which helped to stimulate exports.

In addition to the liberalization of the foreign exchange rate, the introduction of Export incentives was also a contributing factor to the increase in exports over the period as producers were incentivized to grow for export. The Export Retention Scheme being particularly positive in this case as it increased the portion of foreign earnings that agricultural producers could retain from 7.5% in 1991 to 100% by July 1994. The upward sloping trend line is therefore not surprising over the period being reviewed. This policy was

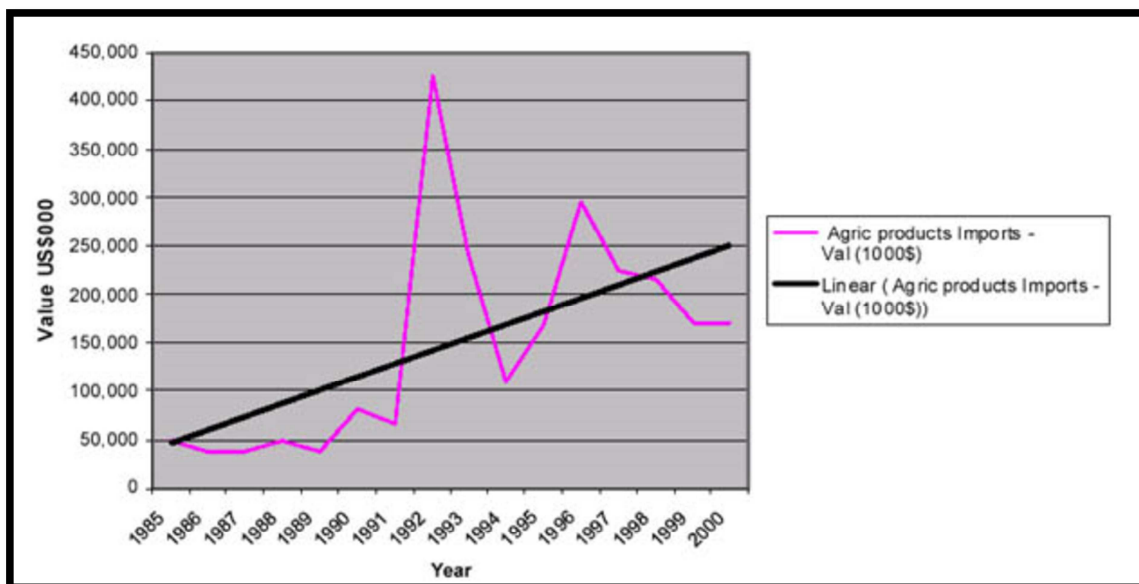
implemented consistently throughout the adjustment period and it continued even after the end of ESAP.

Considering the actual data itself, over the period 1991-1995, it appears to have been quite erratic, starting with export levels of USD700 million with a sharp decline in 1992 to USD600 million followed by a sharp increase in 1994 to USD1, 2 Billion and ending with a sharp decline once again at the end of the adjustment period 1995 to USD900 billion. These peaks and valleys appear to coincide with the rainfall pattern, with years in which rainfall levels increased showing a marked increase in productivity and export levels and years in which rainfall levels were poor showing a decrease in productivity and a marked decrease in export levels, despite consistent application of Export retention scheme and devaluation of the Zimbabwean dollar which made Zimbabwean goods cheaper

These results suggest that the objective of ESAP policies for export led growth were successful in this respect. When these results are considered together with the results of agricultural imports, it appears the Export Incentive Schemes were highly effective, and the removal of government subsidies for imports greatly disincentivised the sectors dependence on them, forcing them to find local alternatives

#### **4.2 Agricultural Imports**

The expectation is to see an initial increase in raw material imports as the previously protected trade industry in Zimbabwe was opened up to international competition which would be cheaper given the decrease in import tariffs. This increase would be followed by a decline as industry begins to offer competitive prices to the agricultural industry. Below is a graph of the actual agricultural exports over the period:



**Figure 7: Agricultural Imports**

Source: (Food and Agriculture Organization, 2003)

Agricultural imports are an indication of the extent to which Zimbabwe depends on other countries for agricultural produce. With the liberalization of trade in the country, the expectation is that the level of importation would have increased as well as more competitively priced products would flow into the country. From the upward sloping trend line in the graph above, it appears imports did indeed increase over the period under review.

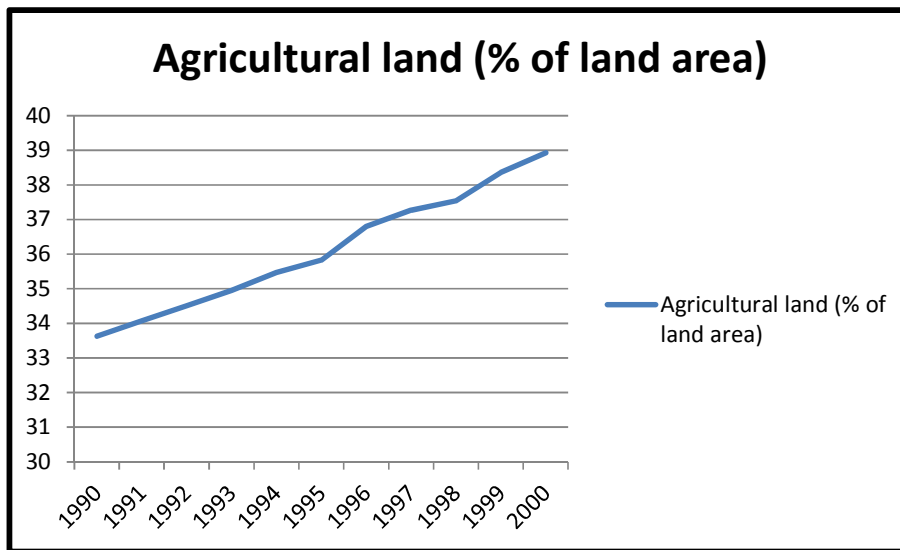
Shortly after the start of the adjustment period in 1991, there was a sharp increase in agricultural imports. Given that Zimbabwe experienced a severe drought in 1992, this is unsurprising as there was not enough agricultural produce due to poor rainfall. In addition, the increase in imports in 1992 was also due to government intervening and importing food from neighboring countries in order to curb the pending famine, as well as donor agencies sending food to the country for the rural poor who could not afford the steep costs of importing food stuffs (Marquette, 1997)

As a result of the above as well as in line with ESAP recommended policies, in 1992, the Zimbabwean government allowed for the non-discretionary import of goods. Despite this move toward complete liberalization of trade, the Zimbabwean government still maintained a level of control over the growing of the Country's staple, maize. This was in line with the

government's prioritization of food security at all costs. As highlighted in the literature review, before the adjustment period, subsistence farmers increased their production of maize, providing up to 80% of the country's supply of maize. This trend continued throughout the adjustment period, with the exception of drought years when overall productivity in the sector fell (Kanyenze et. al, 2011)

#### 4.3 Percentage Agricultural land

Land is one of the key elements of agriculture, and in order to assess the extent to which ESAP policies were successful, it is worth noting the trends in total land under agricultural production. During the research period, there were key changes to legislation surrounding land ownership and use. As discussed in the literature review, these had an effect on the sectors productivity.



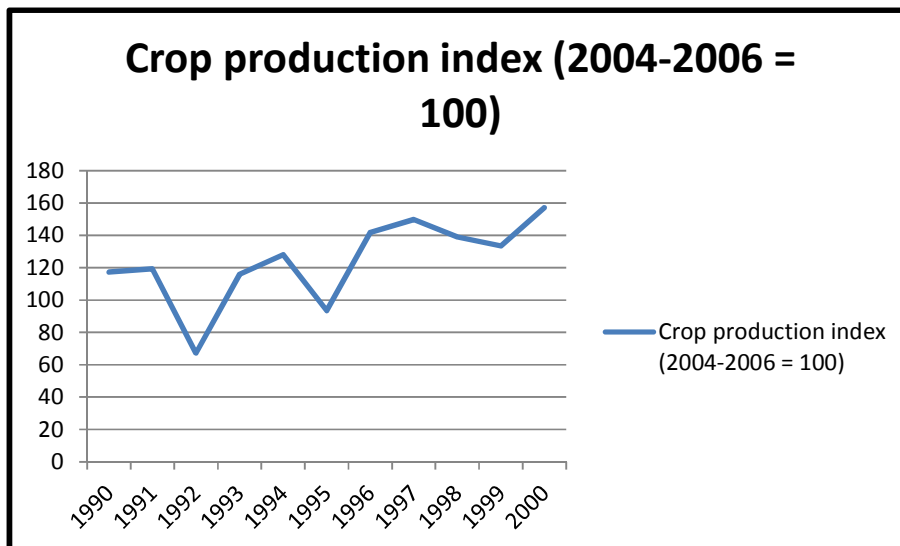
**Figure 8: Agricultural Land**

The graph above shows that the percentage of agricultural land increased during the period under review from over 33% to over 39%. The increase was steady and happened year on year. This supports the assertion made by the World Bank (2015) that an increase in agricultural output in Sub-Saharan Africa is a function of an increase in the actual area of land being cultivated as opposed to any real improvement in efficiency (The World Bank, 2015). When this is taken into consideration together with the indicators on productivity in the following sections, it brings to light that perhaps not all of the increase in productivity is in fact due to ESAP policies.



#### 4.4 Crop Production Index

An improvement in efficiency in the agricultural sector was expected in response to the loosening of control by government with respect to prices and the introduction of competition. This would have incentivized producers in the agricultural sector to become more efficient and increase production becoming net producers instead of net consumers. This would have had implications not only for good available for export, but for food security as well, which from the onset of ESAP was a major concern for the Zimbabwean government (Kanyenze et. al, 2011). The graph below shows the crop production index over the period under review.



**Figure 9: Crop Production Index**

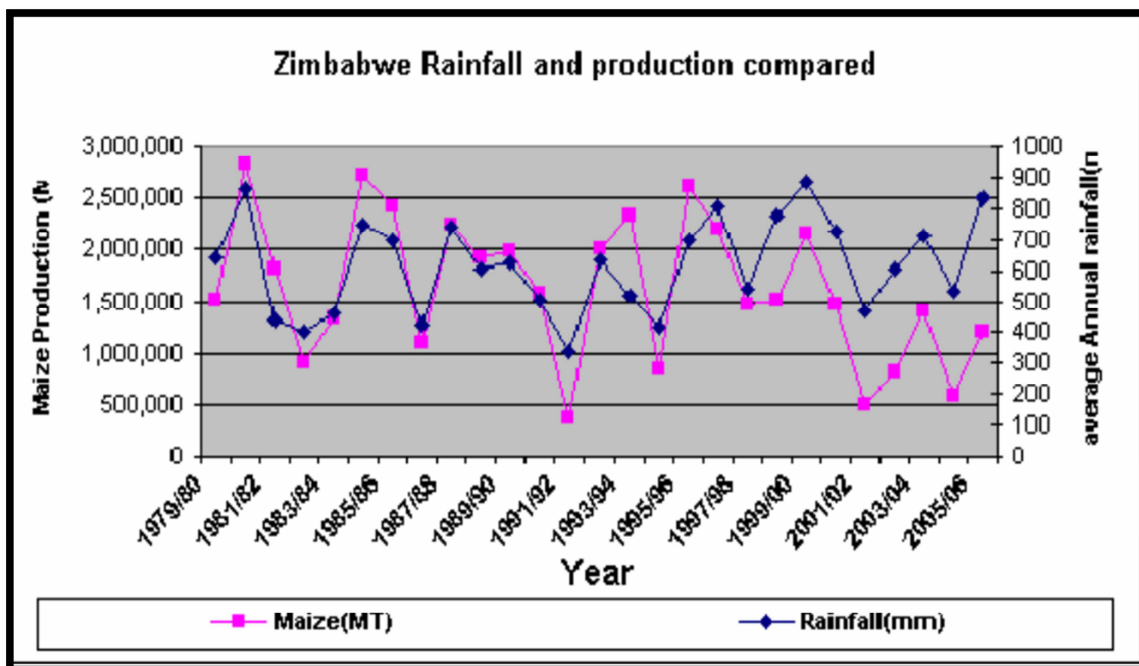
As can be expected, the graph above begins with a significant decline in 1992 which can be attributed to the severe drought the country experienced. Following 1992, it appears the crop production index rebounded strongly, increasing steadily to over 120 which is higher than pre-adjustment levels of 120. This show of improvement however appears to have preceded a sharp decline in 1995 to slightly under 100 which coincides with the end of the adjustment period. Following 1995, there was another sharp rebound, with the general trend from 1996

to 2000 being upward sloping, which shows an overall improvement in the index in the period under review.

The two troughs in 1992 and in 1995 coincide with years in which levels of rainfall were low. The general trend of the data over the research period, is however upward sloping. This suggests that despite the liberalization of trade and government allowing non-discretionary imports, the agricultural sector still managed to maintain productivity levels. Critics of ESAP have highlighted that although there was an overall increase in productivity in the sector, only the large commercial farms were able to benefit from the trade liberalization policies as they had access to funding from the AFC and were able to afford the agricultural inputs that were no longer subsidized. Small holders, had minimal access to financing despite government instructing the AFC to provide them with credit lines. The cost of financing was also prohibitively high as a result of the removal of intervention in interest rates which at the start of the adjustment period were negative in real terms. (Jayne ,et al.,2001)

In this way, the increase in productivity in the sector was not equitably distributed, both as a direct result of ESAP policies as well as indirectly through liberalization of the interest rate which pushed up the cost of financing from commercial banks (Kanyenze ,et al., 2011). The result was that small holders increased their dependence on labour driven productivity as opposed to the large commercial farms that relied more on capital driven productivity which resulted in employment levels in the sector suffering. By the time the AFC was renamed Agribank in 1996 and its mandate changed to extend credit to small holders, the adjustment period was over.

In considering the productivity of the agricultural sector, it is also important to note the strong correlation between annual rainfall levels and crop production as illustrated in the below graph which uses maize as a proxy for all agricultural produce:



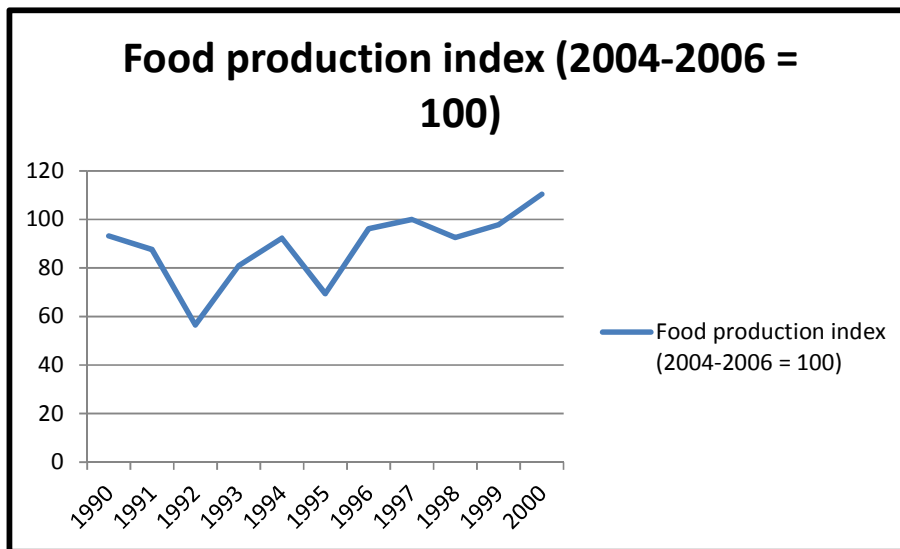
**Figure 10: Comparison of Rainfall and Maize Production**

Source: (Moyo, Zimbabwe's agrarian Reform and Prospects for Recovery, 2009)

The trend that emerges is that rainfall levels are a strong determinant of productivity levels in the agricultural sector. This is important to note in assessing the impact of ESAP policies on the sector as the policy formulation and implementation may have been correct, but environmental factors may have resulted in a different outcome. This together with the Zimbabwean policy environment which is largely reactive in policy formulation resulted in the implementation of some policies pertaining to imports and the provision of subsidies being deferred until the drought crisis was averted (Marquette, 1997).

#### 4.5 Food Production Index

As has been highlighted, food security was a major concern for the Zimbabwean government. The Government made food security and self-sufficiency a priority and made this clear to the IMF and World Bank before undertaking to be part of ESAP. The graph below depicts the food production index over the period researched. It is very closely linked to crop production index, however it focuses more specifically on edible crop production.



**Figure 11: Food Production Index**

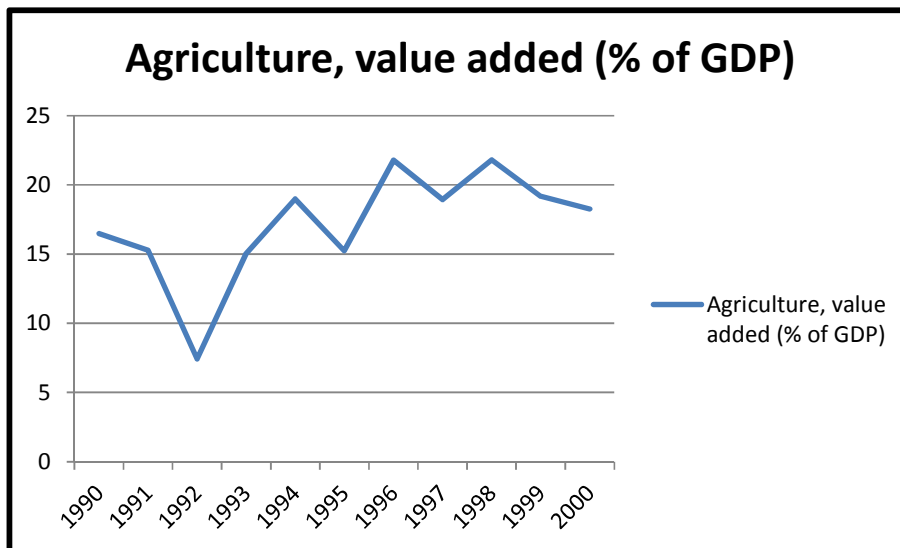
The food production index decreased sharply in 1992 as a result of the drought that the country experienced. The index rebounded strongly however, to pre-drought levels of 90 which was followed by another sharp decline at the end of the adjustment period in 1995. From 1995, the index appears to have improved year on year albeit a slight dip in 1997-1998.

The implications of the above on food security appear to indicate the ESAP did not have any real significant impact on the food security of the country as a whole. It must be noted however that the ESAP policies were formulated on the premise that Zimbabwe should focus on export led growth and as such the focus of policy recommendations was to encourage the production of export crops rather than the staple food crops maize and wheat (Heidhues & Obare, 2011; Kanyenze, et al., 2011). The Zimbabwean government however maintained controls on maize production in the sector, with the GMB setting a price floor and ceiling and remaining the only legal exporter and importer of maize in the country throughout the adjustment period and up to 2000. (Anseeuw, Kapuya, & Saruchera, 2012)

#### **4.6 Agriculture Value Added (% GDP)**

The agricultural sector was expected to contribute more in terms of value as a percentage of Zimbabwe's Gross Domestic Product. This would come from not the increase in crop production, but also from the incentives for farmers to grow for export, which would typically have a higher profit margin than the production of crops for domestic consumption or food crops. The agricultural sector was identified as one of the main areas for adjustment

due to its contribution to the Zimbabwean economy. This indicator is therefore one of the easiest to identify as to the outcomes of ESAP on agricultures contribution to overall GDP.



**Figure 12: Agriculture Value Added**

There was a sharp decline in the index in 1992, and this can be attributed to the severe drought which affected the crop production index and therefore overall income generated by the sector. The sharp decline was followed by a sharp increase, with the sector contributing more to GDP in 1994 at 18% than it did before adjustment in 1990 at 16%. This improvement was followed by a decline in 1995 which was short-lived as the sector rebounded in 1996, contributing the most that the sector contributed during the whole time period under review at 21%. From 1996, there was a general decrease in the sectors contribution to the GDP, despite a slight increase in 1998-1999.

The general trend is upward sloping which suggests that over the adjustment period, the agricultural sector contributed increasingly to the country's GDP. Given the objective of ESAP was export led growth and policy aim was to encourage production for export, this was the expected outcome.

## **CHAPTER 5: CONCLUSION**

This research set out to identify the effect of ESAP on the agricultural sector and to assess whether policy implementation was consistent throughout the adjustment period in Zimbabwe. To this end, the research considered not only the results in terms of export and

import volume and contribution to GDP, but the implementation of policy and input factors such as rainfall as well. The nature of the research was important as it will provide an important basis on which to conduct further research on the formulation of agricultural policy pertaining to economic development in low income countries in Sub-Saharan countries as well as shedding light on the complexity of the sector.

To begin with, the research area was studied at length to identify gaps in research that had previously been conducted, with the major finding being that although there had been substantial research conducted on the input-output relationship between ESAP policies and outcomes in the sector, there was very little focus on the implementation of the policies and the policy environment itself. Following this gap identification, the researcher conducted a broad literature review and through this process, the complexity of the sector and the multiple variables affecting it came to light.

The researcher gathered data on not only the expected outcomes of ESAP, being exports, imports, prices and value added to GDP, but also on the identified variables that had the most material impact on the sector, land and rainfall. This data was analyzed to identify any themes that emerged, and these were considered in the context of ESAP policies implemented as well as the variables identified that would explain the broad trend of the data. The conclusion of the research was to identify the effects of ESAP on the sector, bearing in mind the themes identified in the variables and their relation to the sector.

As has been highlighted, only the direct effects of ESAP policies on the agricultural sector were within the scope of the research. From the data analysed in the preceding section, it appears ESAP policies had a positive effect on the overall productivity of the sector. In addition, the export incentive schemes appear to have been a success, with exports increasing over the research period and the agricultural sectors contribution to the GDP also increasing over the period.

The relationship between rainfall patterns and agricultural productivity appears to have had a detrimental effect on the effectiveness of ESAP policies, with the severe drought in 1992 negating some ESAP policies that had already been implemented such as a reduction in social spending, and delaying the implementation of some policies due to the pressing need for drought relief.

## **CHAPTER 6: FURTHER RESEARCH AREAS**

Whilst all care was taken to ensure that any challenges foreseen were mitigated, in conducting this research, there were a number of unforeseen challenges. The research was conducted using thematic analysis as a strategy, which depended on the researcher's interpretation of the themes identified in the data. The researcher's interpretation is therefore a subjective view that is underpinned by numeric evidence gathered from secondary sources and this is not a strong enough basis to inform future policy recommendation. Given that the nature of the research took the form of case-study however, which was exploratory and descriptive in nature, the research may highlight areas in which further data must be collected an analysis conducted which may then be used as the basis for future policy formulation.

As the researcher was reviewing the literature on the agricultural sector in Sub-Saharan Africa and Zimbabwe specifically, it became clear that agriculture is not just a means to an economic end. Given that most low income countries in Sub-Saharan Africa are former colonies, the agricultural sector is the subject of many socio-political debates relating to the redistribution of land from white people to the countries indigenous people. In addition to this, given that during the research period, the Zimbabwean economy was agro-based, the sector also had a direct impact on the countries social development, employment, food security and poverty alleviation. Although this social dimension is not in the scope of this study, it is important to note that it is directly related to the sectors performance and warrants further research.

In addition to the above, the importance of the political landscape also emerged particularly in creating an environment that encourages proactive policy formulation and implementation so as to ensure consistency in the sector. This would not only yield real results, but it would improve policies already being implemented as the question as to whether they are being applied correctly if at all would not be an issue.

## **Bibliography**

- Abalu, G., Mucavele, F., N'gon'gola, D., Rooyen, J. v., Kirsten, J., Zyl, J. v., et al. (1996). *Comparative Analysis of Structural Adjustment Programs in Southern Africa - With Emphasis on Agriculture and Trade*. Nairobi: Office of Sustainable Development - Bureau for Africa.
- African Development Bank. (n.d.). From Stagnation to Economic Recovery. *Zimbabwe Report*, 1-15.
- Anseeuw, W., Kapuya, T., & Saruchera, D. (2012). *Zimbabwe's Agricultural Reconstruction: Present State; Ongoing Projects and Prospects for Reinvestment*. Johannesburg: Development Bank of Southern Africa - Development Planning Division.
- Asiedu, E. (2004). Policy Reform and Foreign Direct Investment in Africa: Absolute Progress but Relative Decline. *Development Policy Review*, 41-48.
- Chapoto, A. (2000). *A Time Series Analysis of maize Grain Prices in Zimbabwe*. Harare: University of Zimbabwe.
- Chattopadhyay, R. (2000). Zimbabwe: Structural Adjustment, Destitution and Food insecurity. *Review of African Political Economy*, 307-316.
- Chisvo, M. (2000). *Reaoing teh Whirlwind: Economic Liberalisation and Food Security in Zimbabwe*. London: Catholic Institute for International Relations.
- Christiaensen, L., Demery, L., & Kuhl, J. (2010). *The (Evolving) Role of Agriculture in Poverty Reduction*. United Nations University - World Institute for Development Economics Research.
- Daly, J., Kellehear, A., & Gliksman, M. (1997). *The public health researcher: A methodological approach*. Melbourne, Australia: Oxford University Press.
- Davis, R., & Rattso, J. (1996). Growth, distribution and environment: Macroeconomic issues in Zimbabwe. *World Development*, 395-405.
- Dawson, J. (1992). *Responses to Adjustment - The Marginilazation of Small Enterprises in Nigeria*. IT Publications.



- Economic and Social Development Department. (2015). *WTO agreement on agriculture: the implementation experience*. Food and Agriculture Organization of the United Nations.
- Economic.co.zw. (n.d.). *Zimbabwe - An Economy on the Edge, Since 1980*. Retrieved June 9, 2015, from Robertson Economic Information Services:  
[http://www.economic.co.zw/index.php?option=com\\_content&view=article&id=1185:zimbabwe--an-economy-on-the-edge-since-1980&catid=111:zimbabwe-history&Itemid=557](http://www.economic.co.zw/index.php?option=com_content&view=article&id=1185:zimbabwe--an-economy-on-the-edge-since-1980&catid=111:zimbabwe-history&Itemid=557)
- Food and Agriculture Organization. (2003). *WTI Agreement on Agriculture: The Implementation Experience*. Rome: Food and Agriculture Organization - United Nations.
- Food and Agriculture Organization. (2006). *Food Security and Agricultural Development in Sub-Saharan Africa*. FAO Policy Assistance Division.
- Food and Agriculture Organization. (2009). The special challenge for sub-Saharan Africa. *How to Feed the World* (pp. 1-4). Rome: Food and Agriculture Organization.
- Gerring, J. (2004). What is a Case Study and What is it good for? *American Political Science Review*, 1.
- Gunter, B. G., Rahman, J., & Shi, H. (2009). Linking Social Development with the Capacity to Carry Debt: Towards an MDG- Consistent Debt-Sustainability Concept. *Development Policy Review*, 269-286.
- Gurtner, B. (2010). The Financial and Economic Crisis and Developing Countries. *International Development Policy*, 189-213.
- Haggblade, S., Hazell, P., & Dorosh, P. (2007). *Sectoral Growth Linkages between Agriculture and the Rural Nonfarm Economy*. Baltimore: Johns Hopkins University Press.
- Harsmar, M. (2007). *Agricultural Development in Sub-Saharan Africa*. Frosundavik: Food, Agriculture and Natural Resources Policy Analysis Network.

- Hartley, J. (2014, July 28). *The BRICS bank Is Born Out of Politics*. Retrieved December 15, 2014, from Forbes: <http://www.forbes.com/sites/jonhartley/2014/07/28/the-brics-bank-is-born-out-of-politics/>
- Harvard Business Review. (2013). South Africa in the BRICS - Evolving International Engagement and Development. *Harvard Business Review*, pp. 17-21.
- Heidhues, F., & Obare, G. (2011). Lessons from Structural Adjustment Programmes and their Effects in Africa. *Quarterly Journal of International Agriculture*, 55-64.
- Hoven, R. V., Marinakis, A., Bailey, C., & Ginneken, W. V. (1993). *Structural Change and Adjustment in Zimbabwe*. Geneva: International Development Project on Structural Adjustment.
- International Monetary Fund. (1998, November 21). *Distilling the Lessons from the ESAF Reviews*. Retrieved from International Monetary Fund: <https://www.imf.org/external/pubs/ft/distill/index.HTM>
- International Monetary Fund. (2004, April). *IMF Concessional Financing through ESAF*. Retrieved from International Monetary Fund: <http://www.imf.org/external/np/exr/facts/esaf.htm>
- International Monetary Fund. (2015, July 10). *The IMF at a Glance*. Retrieved from The International Monetary Fund: <http://www.imf.org/external/np/exr/facts/glance.htm>
- Jansen, D., & Rukovo, A. (1992). *Agriculture and the Policy Environment: Zambia and Zimbabwe*. Paris: Organisation for Economic Co-operation and Development (OECD).
- Jayne, T. S., Govereh, J., Mwanaumo, A., Chapoto, A., & Nyoro, J. K. (2001). False Promise of False Premise? The Experience of Food Input Market Reform in Eastern and Southern Africa. In T. S. Jayne, G. Argwings-Kodhck, & I. Minde, *Perspectives on Agricultural Transformation: A View from Africa*. New York: Nova Science Publishers.
- Jeffries, R. (1993). The State, Structural Adjustment and Good Governance in Africa. *Journal of Commonwealth and Comparative Politics*, 7.

- Johnston, B., & Mellor, J. (1961). The Role of Agriculture in Economic Development. *American Economic Review*, 566-593.
- Kadenge, P., Ndoro, H., & Zwizwai, B. (1992). *Zimbabwe Structural Adjustment Programme: the first year experience*. Harare: SAPES Books.
- Kanyenze, G., Kondo, T., Chitambara, P., & Martens, J. (2011). *Beyond the Enclave*. Harare: Weaver Press.
- Kapuya, T., Saruchera, D., Jongwe, A., Mucheri, T., Mujeyi, K., Ndobongo, L., et al. (2010). *The Grain Industry Value Chain in Zimbabwe*. Pretoria: Food and Agriculture Organization.
- Khamfula, Y., Mlachila, M., & Chirwa, E. (2007). Donor herding and domestic debt crisis. *Applied Economic Letters*, 299-302.
- Koeda, J. (2008). A Debt Overhang Model for Low Income Countries. *IMF Staff Papers*, 654-678.
- Lincoln, E. G. (1994). Research, Competing Paradigms in Qualitative. *Handbook of Qualitative Research*.
- Liu, H. C. (2009, August 20). *Money and Commodity Markets- Integrity Deficit has its price*. Retrieved from Asia times: [http://www.atimes.com/atimes/Global\\_Economy/KH20Dj02.html](http://www.atimes.com/atimes/Global_Economy/KH20Dj02.html)
- Luebker, M. (2008). *Employment, unemployment and informality in Zimbabwe: Concepts and data for coherent policy-making*. Harare: International Labour Organization.
- Machemedze, R. (2008, August 17). Zimbabwe and the IMF - Time for shifting from neo-liberal paradigm to people centered development alternatives. *Southern African Regional Poverty Network*, pp. 1-5.
- Maiyaki, A. A. (2010). Zimbabwe's Agricultural Industry. *African Journal of Business Management*, 4159-4166.

- Mano, R., & Nhemachena, C. (2007). *Assessment of the Economic Impacts of Climate Change on Agriculture in Zimbabwe*. Washington DC: World Bank Policy Research Working Paper.
- Marinakos, A., Bailey, C., Van der Hoven, R., & Van Ginneken, W. (1993). Structural Change and Adjustment in Zimbabwe. *International Development Project on Structural Adjustment*.
- Marquette, C. (1997). Current Poverty, Structural Adjustment and Drought in Zimbabwe. *World Development*, 1141-1147.
- Martens, J. (2012). *How Zimbabwe Lost its Food Sovereignty and Security*. Rosa Luxemburg Stiftung.
- Melville, W. G. (1996). *Research Methodology: An Introduction*. Cape Town: Juta&Co Ltd.
- MoatemriOuarda, A. E. (2013). Herding Behaviour under Markets Condition: Empirical Evidence on the European Financial Markets. *International Journal of Economics and Financial Issues*, 214-228.
- Moyo, S. (2000). *Land Reform under Structural Adjustment in Zimbabwe*. Stockholm: Elanders Gotab.
- Moyo, S. (2009). *Zimbabwe's agrarian Reform and Prospects for Recovery*. Pretoria: University of South Africa, UNISA African Visiting Scholars Lecture Series.
- Mudimu, G. (2003). *Zimbabwe Food Security Issues Paper*. Forum for Food Security in Southern Africa.
- Mumbengegwi, C. (1992). *Structural Adjustment and Small Scale Enterprises in Zimbabwe*. IT Publications.
- Muzari, W., & Gwangwava, E. (2014). The IMF/World Bank Economic Structural Adjustment Programmes in Sub-Saharan Africa: What Were the Impacts on Small Enterprise Development. *International Journal of Science and Research*, 1757-1762.
- Naiman, R., & Watkns, N. (1999). *A Survey of IMF Structural Adjustment in Africa: Growth, Social Spending and Debt Relief*. Center For Economic and Policy Research.

- Nyanga, T. (2013). Agriculture: the Unseen Employment Creation Tool in Masvingo District, Zimbabwe. *Journal of Sustainable Development in Africa*, 1-10.
- O'Carroll, L. (2014, July 23). *The BRICS Bank and Bretton Woods*. Retrieved December 17, 2014, from BeyondBrics: <http://blogs.ft.com/beyond-brics/2014/07/23/guest-post-the-brics-bank-and-bretton-woods/>
- Peters, P. E. (1996). *Failed Magic or Social Context? Market Liberalization and the Rural Poor in Malawi*. Cambridge: Harvard Institute of International Development.
- Pingali, P. I. (2012). *Green Revolution: Impacts, limits, and the path ahead*. Cambridge: Bill and Melinda Gates Foundation.
- Potts, D., & Mutambirwa, C. (1998). "Basics are now a luxury": perceptions of structural adjustment's impact on rural and urban areas in Zimbabwe. *Environment and Urbanization*, 55-75.
- Ranis, G. (2004). *Arthur Lewis' Contribution to Development Thinking and Policy*. New Haven: Yale University.
- Robinson, P. B. (1991). *An Economic Assessment of Rural Industrial Prospects under the Economic Structural Adjustment Programme*. Zimconsult.
- Schultz, T. W. (1964). *Transforming Traditional Agriculture*. New Haven: Yale University Press.
- Sichone, O. (2003). Zimbabwe's Economic Policies, 1980-2002. *DPMN Bulletin*.
- Staatz, J. M., & Dembele, N. N. (2008). *Agriculture for Development in Sub-Saharan Africa*. Michigan: World Bank.
- Stein, H. (1994). Theories of institutions and economic reform in Africa. *World Development* 22(12), 1833-1849.
- Takavarasha, T. (1994). Agricultural Price Policy. In M. Rukuni, & C. Eicher, *Zimbabwe's Agricultural Revolution*. Harare: University of Zimbabwe Press.
- The World Bank. (2014). *Agriculture and Rural Development*. Retrieved from The World Bank : <http://data.worldbank.org/topic/agriculture-and-rural-development>

- The World Bank. (2015, July 25). *The World Bank and Agriculture in Africa*. Retrieved from The World Bank:  
<http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/0,,contentMDK:21935583~pagePK:146736~piPK:146830~theSitePK:258644,00.html>
- United Nations Development Programme. (2008). *Comprehensive economic recovery programme for Zimbabwe. Discussion document*. United Nations Development Programme.
- Van de Walle, N. (2000). *Economic Reform in Africa, 1980-2000: Patterns and Constraints*. Lisbon: The Gulbenkian Foundation.
- While, A., & Bergen, A. (2000). A case for case studies: Exploring the use of case study design in community nursing research. *Journal of Advanced Nursing*, 926-934.
- World bank. (2008). *The Growth Report: Strategies for Sustained Growth and Inclusive Development*. Washington: World Bank Commission on Growth and Development.
- World Food Program. (2013, October 1). *Millenium Hunger Target Within Reach*. Retrieved from World Food Program: <https://www.wfp.org/stories/millennium-hunger-target-within-reach>
- Yin, R. (2014). *Case Study Research - Design and Methods*. California: Sage Publications Inc.
- Zimbabwe Central Statistical Office. (2006). *Labour Force Survey*. Harare: Central Statistical Office.
- ZimStat. (2015, July 10). *Zimbabwe GDP Annual Growth Rate*. Retrieved from Trading Economics: <http://www.tradingeconomics.com/zimbabwe/gdp-growth-annual>

## Appendix I

### Zimbabwean GDP Growth Rate Data

Series Name	Country Name	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GDP growth (annual %)	Zimbabwe	14.42	12.53	2.63	1.59	-1.91	6.94	2.10	1.15	7.55	5.20	6.99	5.53	-9.02	1.05	9.24	0.16	10.36	2.68	2.89	-0.82	-3.06

**Indicator name:** GDP growth (annual %)

**Definition:** Annual percentage growth rate of GDP at market prices based on constant local currency. Aggregates are based on constant 2005 U.S. dollars. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.

**Source:** World Bank national accounts data, and OECD National Accounts data files.

FULL COLOUR THINKING



## Appendix II

### Poverty Data

Country	Country Code	Series Name	1981	1984	1987	1990	1993	1996	1999	2002	2005	2008	2010	2011
Sub-Saharan Africa (developing only)	SSA	Number of poor at \$1.25 a day (PPP) (millions)	210.4	244	263.3	291	338	359.2	385.8	400.7	398.9	403.4	411.3	415.8
Sub-Saharan Africa (developing only)	SSA	Poverty headcount ratio at \$1.25 a day (PPP) (% of population)	52.8	56.2	55.7	56.6	60.9	59.7	59.3	57.1	52.8	49.7	48.2	46.8

**Indicator Name:** Number of poor at \$1.25 a day (PPP) (millions)

**Definition:** Number of the poor population in millions living on less than \$1.25 a day at 2005 international prices.

**Indicator Name:** Poverty headcount ratio at \$1.25 a day (PPP) (% of population)

**Definition:** Population below \$1.25 a day is the percentage of the population living on less than \$1.25 a day at 2005 international prices. As a result of revisions in PPP exchange rates, poverty rates for individual countries cannot be compared with poverty rates reported in earlier editions.

**Source:** World Bank, Development Research Group. Data are based on primary household survey data obtained from government statistical agencies and World Bank country departments. For more information and methodology, please see PovcalNet (<http://iresearch.worldbank.org/PovcalNet/index.htm>).



## Appendix III

### Agriculture Value Added Data – Sub Saharan Africa

Series Name	Country Code	1990	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Agriculture, value added (% of GDP)	SSA	20.87	17.14	17.14	16.45	16.37	16.76	17.53	15.05	14.69	14.70	14.18	13.98

**Indicator name:** Agriculture, value added (% of GDP)

**Definition:** Agriculture corresponds to ISIC divisions 1-5 and includes forestry, hunting, and fishing, as well as cultivation of crops and livestock production. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. The origin of value added is determined by the International Standard Industrial Classification (ISIC), revision 3. Note: For VAB countries, gross value added at factor cost is used as the denominator.

**Source:** World Bank national accounts data, and OECD National Accounts data files.

## Appendix IV

### **Real Interest Rate Data – Zimbabwe**

Series Name	Country Name	Country Code	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Real interest rate (%)	Zimbabwe	ZWE	4.26	12.75	18.43	37.53	47.47	41.19	4.60	5.42	4.84	12.11	12.75	23.90	39.48	41.70	40.33	30.76	23.17	36.48	94.73	43.87	67.16

**Indicator Name:** Real interest rate (%)

**Definition:** Real interest rate is the lending interest rate adjusted for inflation as measured by the GDP deflator. The terms and conditions attached to lending rates differ by country, however, limiting their comparability.

**Source:** International Monetary Fund, International Financial Statistics and data files using World Bank data on the GDP deflator.

## Appendix V

### Zimbabwe Agricultural Sector Data: 1990-2000

Series Name	1990 [YR1990]	1991 [YR1991]	1992 [YR1992]	1993 [YR1993]	1994 [YR1994]	1995 [YR1995]	1996 [YR1996]	1997 [YR1997]	1998 [YR1998]	1999 [YR1999]	2000 [YR2000]
Improved water source, rural (% of rural population with access)	70.80	70.70	70.60	70.50	70.40	70.30	70.20	70.10	70.00	69.90	69.80
Agricultural raw materials imports (% of merchandise imports)	2.58	2.79	2.08	2.11	2.03	1.90	2.01	1.90	..	1.67	..
Agricultural raw materials exports (% of merchandise exports)	7.28	6.50	4.92	6.23	6.13	6.76	7.62	10.59	..	9.76	12.53
Agricultural land (% of land area)	33.63	34.07	34.51	34.95	35.47	35.83	36.80	37.27	37.53	38.36	38.93
Crop production index (2004-2006 = 100)	117.20	119.27	67.29	115.92	127.99	93.38	141.82	149.81	139.04	133.39	157.08
Food production index (2004-2006 = 100)	93.15	87.64	56.48	80.96	92.28	69.35	96.13	100.03	92.57	97.80	110.48
Livestock production index (2004-2006 = 100)	75.64	73.95	79.91	70.39	69.67	71.63	72.85	74.28	83.57	89.07	96.69
Cereal yield (kg per hectare)	1625.41	1337.20	412.64	1478.48	1472.52	537.43	1523.69	1267.84	1110.31	1063.27	1404.49
Agriculture value added per worker (constant 2005 US\$)	398.73	391.93	294.25	366.41	385.70	350.52	413.12	420.18	442.87	466.33	474.20
Agriculture, value added (% of GDP)	16.48	15.27	7.41	15.04	18.97	15.24	21.77	18.93	21.79	19.18	18.26
Agriculture, value added (constant 2005 US\$)	1,144,344,201.57	1,156,189,667.46	888,051,285.52	1,128,909,217.70	1,211,468,571.14	1,119,576,420.67	1,341,409,725.31	1,384,484,192.44	1,454,839,109.34	1,519,772,513.60	1,550,167,938.74
Land under cereal production (hectares)	1576058	1547963	1168509	1697030	1935023	1814615	2054659	2161291	1658587	1822948	1793790

- **Indicator name:** Improved water source, rural (% of rural population with access)

**Definition:** Access to an improved water source refers to the percentage of the population using an improved drinking water source. The improved drinking water source includes piped water on premises (piped household water connection located inside the user's dwelling, plot or yard), and other improved drinking water sources (public taps or standpipes, tube wells or boreholes, protected dug wells, protected springs, and rainwater collection).

**Source:** WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation (<http://www.wssinfo.org/>).

- **Indicator name:** Agricultural raw materials imports (% of merchandise imports)

**Definition:** Agricultural raw materials comprise SITC section 2 (crude materials except fuels) excluding divisions 22, 27 (crude fertilizers and minerals excluding coal, petroleum, and precious stones), and 28 (metalliferous ores and scrap).

**Source:** World Bank staff estimates from the Comtrade database maintained by the United Nations Statistics Division.

- **Indicator name:** Agricultural raw materials exports (% of merchandise exports)

**Definition:** Agricultural raw materials comprise SITC section 2 (crude materials except fuels) excluding divisions 22, 27 (crude fertilizers and minerals excluding coal, petroleum, and precious stones), and 28 (metalliferous ores and scrap).

**Source:** World Bank staff estimates from the Comtrade database maintained by the United Nations Statistics Division.

- **Indicator name:** Agricultural land (% of land area)

**Definition:** Agricultural land refers to the share of land area that is arable, under permanent crops, and under permanent pastures. Arable land includes land defined by the FAO as land under temporary crops (double-cropped areas are counted once), temporary meadows for mowing or for pasture, land under market or kitchen gardens, and land temporarily fallow. Land abandoned as a result of shifting cultivation is excluded. Land under permanent crops is land cultivated with crops that occupy the land for long periods and need not be replanted after each harvest, such as cocoa, coffee, and rubber. This category includes land under flowering shrubs, fruit trees, nut trees, and vines, but excludes land under trees grown for wood or timber. Permanent pasture is land used for five or more years for forage, including natural and cultivated crops.

**Source:** Food and Agriculture Organization, electronic files and web site.

- **Indicator:** Crop production index (2004-2006 = 100)

**Definition:** Crop production index shows agricultural production for each year relative to the base period 2004-2006. It includes all crops except fodder crops. Regional and income group aggregates for the FAO's production indexes are calculated from the underlying values in international dollars, normalized to the base period 2004-2006.

**Source:** Food and Agriculture Organization, electronic files and web site.

- **Indicator:** Food production index (2004-2006 = 100)

**Definition:** Food production index covers food crops that are considered edible and that contain nutrients. Coffee and tea are excluded because, although edible, they have no nutritive value.

**Source:** Food and Agriculture Organization, electronic files and web site.

- **Indicator:** Agriculture value added per worker (constant 2005 US\$)

**Definition:** Agriculture value added per worker is a measure of agricultural productivity. Value added in agriculture measures the output of the agricultural sector (ISIC divisions 1-5) less the value of intermediate inputs. Agriculture comprises value added from forestry, hunting, and fishing as well as cultivation of crops and livestock production. Data are in constant 2005 U.S. dollars.

**Source:** Derived from World Bank national accounts files and Food and Agriculture Organization, Production Yearbook and data files.

- **Indicator:** Agriculture, value added (% of GDP)

**Definition:** Agriculture corresponds to ISIC divisions 1-5 and includes forestry, hunting, and fishing, as well as cultivation of crops and livestock production. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated

without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. The origin of value added is determined by the International Standard Industrial Classification (ISIC), revision 3. Note: For VAB countries, gross value added at factor cost is used as the denominator.

**Source:** World Bank national accounts data, and OECD National Accounts data files.

- **Indicator:** Agriculture, value added (constant 2005 US\$)

**Definition:** Agriculture corresponds to ISIC divisions 1-5 and includes forestry, hunting, and fishing, as well as cultivation of crops and livestock production. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. The origin of value added is determined by the International Standard Industrial Classification (ISIC), revision 3. Data are in constant 2005 U.S. dollars.

**Source:** World Bank national accounts data, and OECD National Accounts data files.

**Indicator name:** Land under cereal production (hectares)

**Definition:** Land under cereal production refers to harvested area, although some countries report only sown or cultivated area. Cereals include wheat, rice, maize, barley, oats, rye, millet, sorghum, buckwheat, and mixed grains. Production data on cereals relate to crops harvested for dry grain only. Cereal crops harvested for hay or harvested green for food, feed, or silage and those used for grazing are excluded.

**Source:** Food and Agriculture Organization, electronic files and web site.

